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THESIS

AN ANALYSIS OF THE FINANCIAL MANAGEMENT  
PROGRAM AT THE NAVAL POSTGRADUATE SCHOOL

by

George Kenneth Robinson, Jr.  
and  
Braden James Phillips

June 1975

Thesis Advisor:

J. F. Schumann

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management community. Both internal and external facets of the financial management program are discussed. Based on the study of the information obtained through interviews, questionnaires, and personal observations of the authors, the thesis offers recommendations to improve the existing financial management program. These recommendations are limited to those that can be implemented relatively easily within the current operating context of the school.





An Analysis of the Financial Management Program  
at the Naval Postgraduate School

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Submitted in partial fulfillment of the  
requirements for a degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL  
June 1975



## ABSTRACT

This thesis assesses the existing financial management program at the Naval Postgraduate School (NPS) in terms of its ability to produce effective financial managers. The financial management program is examined in terms of its validity and appropriateness to satisfy the needs of the service, the school itself, and the student. The investigation includes a comparison of the existing curriculum against the perceptions of a small, but highly selected and knowledgeable group of officers within the financial management community. Both internal and external facets of the financial management program are discussed. Based on the study of the information obtained through interviews, questionnaires, and personal observations of the authors, the thesis offers recommendations to improve the existing financial management program. These recommendations are limited to those that can be implemented relatively easily within the current operating context of the school.

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## I. INTRODUCTION

### A. THE FINANCIAL MANAGEMENT PROGRAM

The Naval Postgraduate School (NPS), Monterey, California offers graduate education in a number of specialized curricula for officers of the U. S. Navy and officers of other U. S. and allied services. In the area of management, the objective of the school is to provide education in the managerial skills essential to the professional development of military officers with diverse academic backgrounds. Upon successful completion of a curriculum in the management area, the officer is hopefully well prepared to face the complex management challenges of the modern Navy.

For the purpose of this thesis, a "curriculum" refers to an aggregation of required and elective courses coupled with research work and a thesis requirement in an area of specialization which a student must satisfactorily complete to earn a Master of Science degree. At the local level, an established administrative hierarchy within the school exists to support the curriculum. Liaison between NPS and the users of the graduates in the Navy is accomplished through a Washington, D. C., headquarters activity known as the primary consultant. The combination of this primary consultant, local administration, and the curriculum itself, for the purpose of this study is termed a "program."

The specific components of the financial management program at NPS include the financial management curriculum (837),



the Operations Research/Administrative Sciences (OR/AS) Department, the Management and Computer Science Curricular Office, and the Office of the Director, Naval Program Planning (OP-090), Office of the Chief of Naval Operations (the primary consultant). The 837 curriculum is designed to provide officers with expertise in the financial management area coupled with a solid background in other areas of management. The administrative hierarchy at NPS to oversee this curriculum is divided into a civilian and military portion. (See Appendix A) The civilian organization is headed by the OR/AS Department Chairman, who concerns himself, among other things, with the administration and management of faculty assets and course offerings in the Department's curricula. A member of the faculty familiar with the Navy and NPS is appointed to provide the liaison between the civilian and military organization. This part-time position is called the Academic Associate.

The military portion of the administrative hierarchy is centered in the Management and Computer Sciences Curricular Office. This office is headed by a naval officer responsible for: 1. Sponsor (primary consultant) liaison, 2. Curriculum development and management, 3. Supervision and counselling of officer students, 4. Resources management, and 5. Additional collateral functions as assigned.<sup>1</sup> The

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<sup>1</sup>Naval Postgraduate School Instruction 5000.1G of 15 April 1971.





Academic Associate teams with the Curricular Officer in the execution of the above responsibilities to ensure academic integrity of the curriculum.

In January 1973 an OPNAV instruction designated OP-090 as primary consultant to the financial management subspecialty.<sup>2</sup> As such, that office serves as the point of contact for the 837 Curricular Officer/Academic Associate team on matters relating to the Navy's needs or requirements of its financial managers. Representing the major users of financial managers in the Navy, OP-090 oversees the graduate education program to ensure that it remains both current and relevant to the problems of the Navy.

An analysis of the financial management curriculum must, in the opinion of the authors, necessarily include consideration of the entire program to be a complete analysis. Hence, this study will focus attention on the components, as identified above, of the financial management program at NPS.

## B. THE CURRICULUM

Graduate education in the management area has been offered at NPS since the early 1960's. The ensuing years saw the management curriculum evolve from a 10 month duration to its current 18 month length. With these changes in length came the addition of optional areas of concentration. It is one of these areas, financial management, with which this study deals.

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<sup>2</sup>OPNAV Instruction 1211.6D of 8 January 1973.



The evolutionary process described above was not without external impetus. In mid-1970 a Visiting Committee for the Department of Business Administration and Economics and the Management Curricula, chaired by Dean William F. Pounds of the Sloan School of Business, Massachusetts Institute of Technology, investigated the problems of the Management Curricula and made several recommendations.<sup>3</sup> The most important of these was to increase the length of the curriculum and reinstate a thesis requirement which had been dropped because of insufficient research time for students in the then 12 month curriculum. In early 1971, a Conference on Management Program Objectives, chaired by Dean William U. Clauser and including senior naval officers such as Rear Admiral (then Captain) R. G. Freeman, III, USN, supported the Pounds study recommendations by proposing a management curriculum which was no less than 18 months in length.<sup>4</sup> It was recommended that the first six months of this curriculum be devoted to management fundamentals and the remaining year to more advanced work with management tools and thesis research. The result of these recommendations was the development of the 18 month 817 curriculum. (See Appendix B)

Naval Postgraduate School operates on a quarter system, that is, the academic year includes four 12 week quarters.

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<sup>3</sup>Superintendent Naval Postgraduate School memorandum of 16 July 1970 on Report of the Visiting Committee (Pound's Report).

<sup>4</sup>Provost Naval Postgraduate School memorandum of 10 March 1971 on Report of Conference on Program Objectives (Captains' Report).



Student credits are assigned for courses on the basis of the number of one-hour class sessions conducted per week. The 817 curriculum consisted of 66 quarter-hours of required course credits. These courses, in keeping with recommendations of the Clauser/Freeman conference, were oriented toward the following areas: financial management, economic analysis and decision making, general management, and behavioral studies.<sup>5</sup> Each student in the 817 curriculum was also required to select at least three elective courses from one of five optional areas of concentration. These areas were Personnel Management, Material Management, Financial Management, Economics, and Management Science. Two additional free elective courses rounded out the 20 quarter-hour credit requirement for electives. A free elective was chosen from any of the management option areas. The thesis requirement, normally in the field of concentration, completed the academic requirements of the 817 curriculum for a Master of Science degree. The curriculum provided a general management education with minor emphasis in an optional field of concentration.

In the fall of 1974, the various option areas of the 817 curriculum received singular recognition in a numerical reorganization of the management curricula resulting in the identification of the option areas as separate curricula. The financial management option of 817 became the 837 curriculum. Under the 817 curriculum several problems had existed. First, three different primary consultants, the Bureau of

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<sup>5</sup>Ibid.





Naval Personnel (BUPERS), the Chief of Naval Material (NAVMAT), and OP-090, were concerned with the curriculum. The overlap of responsibilities resulted in reduced consultant involvement in all three cases. Second, officers were ordered to the 817 curriculum and allowed to opt for their area of concentration. Poor communications resulted in poor identification of the graduates' areas of expertise and thereby limited their utilization. Third, the unstructured option process made it difficult to anticipate faculty requirements in the option areas. The advent of the individually numbered curricula singularized the consultant responsibility and identified the inputs as well as the outputs (barring attrition). In the opinion of the authors, another potential benefit of the reorganization can be a shift from the general management education with emphasis on financial management of the 817 curriculum to a financial management education with emphasis on general management areas under the 837 curriculum.

### C. PROBLEM STATEMENT

The apparent lack of visible consultant involvement in the financial management curriculum, coupled with an apparently over-burdened internal administrative hierarchy in the Operations Research/Administrative Sciences (OR/AS) Department and a paucity of Naval-oriented courses in the financial management area, indicated to the authors probable shortcomings in the Naval Postgraduate School financial management program. After partial completion of their graduate education in the financial management curriculum (817), the authors





perceived the existence of these shortcomings. Concurrently, a reorganization of the management curriculum was being effected which identified the financial management curriculum as a separate entity. In searching for a suitable thesis topic, it seemed quite appropriate to the authors, in light of the possible shortcomings and the opportunity for change presented by the reorganization, to channel their energies in the direction of analyzing the financial management program at the Naval Postgraduate School. The purpose of this thesis is, then, to study the financial management program, to identify and analyze possible problem areas, and, if possible, to recommend improvements to the financial management program and thus enhance the value of its graduates to the Navy and other services.

The analysis of the NPS financial management program has the following objectives:

1. To identify and define problem areas in the existing financial management program and record them in this study.
2. To investigate and, if possible, recommend improvements in the 837 curriculum based on the needs of the service, the school, and the students.
3. To investigate and, if possible, recommend improvements to the financial management program that can be implemented at the level of the primary consultant (external).
4. To investigate and, if possible, recommend improvements to the administrative process of the financial management program that can be implemented at NPS (internal).



#### D. SCOPE

After clearly identifying the problem to be studied, the next step was to realize that this thesis could not cover all possible aspects of the financial management program. Therefore, a set of logical constraints was needed to keep it at a manageable level while insuring that the findings and recommendations received adequate analysis. Accordingly, the scope of this thesis was constrained by the following assumptions:

1. The existing hierarchy of the primary consultant is appropriate in terms of organization, but might be improved by reassessment of the degree of involvement required.
2. The existing 18 month curriculum with possible early graduation through validation is an appropriate length curriculum; no attempt will be made to address alternative curriculum lengths.
3. The existing requirements for graduation, in terms of total credit hours, number of courses and Master's thesis are assumed valid.
4. The financial management curriculum/program addressed in this study is solely that found at the Naval Post-graduate School at the time of this writing. Financial Management programs at other schools, such as the Naval Graduate Education Program at The George Washington University, are not considered in this study.

#### E. RESEARCH METHODS

Research for this thesis included a search for and review of relevant Navy/DOD studies and reports, theses prepared at NPS and The George Washington University, books, and Navy/Marine Corps instructions. This process provided a wealth of background information as well as both theoretical and practical techniques to apply in the analysis and recommended solutions to the problems identified. Interviews



were conducted with financial management faculty members, the financial management Curricular Officer, the OR/AS Department Chairman, the Academic Associate, and the Curriculum Coordinator for the financial management program. Additionally, six other NPS curricular officers (representing 12 curricula), members of the office of the primary consultant, several officers in the financial management community, and the December 1974 NPS financial management graduates were interviewed. These interviews provided a better understanding of the perceived problem areas associated with the respective positions of those interviewed and solicited suggestions for solutions to those problems. It also provided the major recommendations regarding the administration of the program.

A significant part of the research effort was the development, distribution, collection, tabulation, and analysis of a questionnaire sent to a select sample of financial managers to identify the academic requirements of the Navy's financial managers in terms of areas and topics of exposure. The results of this survey and those of the December 1973 Financial Management Survey conducted by the Director, Fiscal Management Division, Office of the Chief of Naval Operations, were a major basis for recommended improvements to the 837 curriculum.

## F. ORGANIZATION

This thesis reviews the background of financial management in the Navy and Marine Corps and recommends improvements to





the financial management program at the Naval Postgraduate School. It assesses the financial management program in terms of meeting the needs of the service, the students, and the school, and recommends improvements to the program.

Chapter I provides a general discussion of the financial management program at NPS and an overview of the basic guidelines within which this thesis is constructed.

Chapter II discusses the background of financial management in the Navy and Marine Corps.

Chapter III describes the role of the primary consultant in the financial management program. Problem areas are addressed and possible solutions are recommended.

Chapter IV defines the needs and desires of the officer-students of the 837 curriculum based on interviews and the personal experience of the authors. Suggestions for fulfilling these desires within the financial management program are offered.

Chapter V addresses the needs of the service as seen by the respondents to the authors' questionnaire. Based on these perceived needs, evaluations are made of the success of the existing curriculum in meeting these needs. Where appropriate, recommendations are made to improve shortcomings of the existing curriculum.

Chapter VI discusses the needs of the school, as perceived by various faculty members and other interested parties, which impact on a successful financial management program. Again, suggestions are offered for satisfaction of these needs.



Chapter VII contains a brief summary of the recommendations of this study and the possible benefits of their implementation.

## II. THE FINANCIAL MANAGEMENT SUBSPECIALTY

### A. OVERVIEW

The United States Navy and Marine Corps have an annual budget of over \$34.1 billion; manage assets worth over \$95 billion; and employ over 725,000 military and half that number of civilian personnel.<sup>6</sup> These totals are greater than any of the major corporations that exist in this country today. It is an understatement that the Department of the Navy is Big Business.

In many ways the Navy is organized like its big business counterparts. While one man is in nominal command of the organization, management of the various assets is dispersed throughout the chain of command at all levels. At each level the commander or manager must be concerned with the optimal utilization of these assets. The planning and programming necessary to insure the success in this area requires at least some degree of expertise in the field of financial management.

The importance of training and education in the area of financial management is underscored by the current international and domestic monetary crisis. Inflation and

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<sup>6</sup>Facts on File, page 69, 1975.



increased technology have greatly increased the cost of modern equipment. Manpower costs have increased markedly in recent years. The involvement of U. S. troops in Viet Nam has ended and a detente policy is now guiding our foreign affairs. These facts contribute to ever increasing cuts to military budget requests and highlight the need for more efficient use of resources and better financial management in the military.

One of the most significant of the problems facing Navy financial managers, however, is their previously poor performance in budgeting for new weapons systems. Cost overruns on many major programs, due in part to poor financial planning, have cost the American taxpayer dearly. In many cases, when these costly weapons systems were delivered, they performed poorly, further destroying Navy credibility with Congress with regard to budget requests. Even the Bureau of Naval Personnel has overspent its appropriated funds in recent years. To maintain a highly effective Navy, in an era of limited dollars, it is indeed incumbent on the Navy to heed these warnings and to improve its financial management. It is, therefore, essential that the financial management curriculum provide the best possible education directly relevant to the Navy.

Financial management in the Navy received its formal recognition in the 1949 amendments to the National Security Act. Title IV of the Act created the position of Assistant Secretary of Defense (Comptroller) and a similar comptroller



position in each service. The law described the functions of a comptroller as budgeting, accounting, progress and statistical reporting, internal audit, and managerial procedures relative to the administrative organizational structure.<sup>7</sup> Subsequently, billets were established at most major commands for comptrollers. Their value and importance has increased substantially over the years.

#### B. THE NAVY OFFICER SUBSPECIALTY BILLET IDENTIFICATION SYSTEM

The technical complexity of the modern Navy has been steadily increasing throughout the twentieth century. During World War II it became apparent that the existing officer structure did not provide the necessary expertise to cope with the technology of advanced weapons systems. The need for regular line officers educated to meet the special requirements of the many technically oriented billets became apparent. In recognition of this fact, the Chief of Naval Personnel appointed the Weakley-Daniel Board in 1956 to: "Review all aspects of the Postgraduate Education Program and to make recommendations pertinent to current and future educational requirements and officer career planning."<sup>8</sup>

The Weakley-Daniel Board noted the limitations of the then voluntary system of postgraduate education in terms of

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<sup>7</sup>Title IV, Public Law 216, 81st Congress.

<sup>8</sup>Report on the Postgraduate Education Program of the Navy, 1956, prepared by a Board appointed by the Chief of Naval Personnel. (Weakley-Daniel Board)







filling the technical billets with line officers and recommended the screening of all officers by a Postgraduate Selection Board to determine eligibility. Eligible officers were to be selected for education in the various subspecialty areas.

The high level concern for the Navy problem of filling technical billets continued in 1959 with the Franke Committee which recommended that Unrestricted Line (URL) officers be provided the increased depth of education to meet the technical and, for the first time, managerial requirements of the Navy.<sup>9</sup> The tendency at that time had been to meet the technical requirements with officers skilled in a specific field but restricted from command opportunity by the narrow confines of their technically oriented career. The Franke Committee foresaw the need to utilize URL's in more specialized billets. The Keith Board was convened in July 1959 to develop a plan for the implementation and execution of the recommendations of the Franke Committee.<sup>10</sup>

The thrust of the Keith Board proposal was a program of subspecialization for URL's in which those officers would be educated in an area requiring technical skill to augment

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<sup>9</sup>Unrestricted line officers are those officers, eligible for command at sea, in various specialties in the Navy, such as Surface Warfare, Aviation, and Submarines.

<sup>10</sup>Report of a Board to Study The Billet Requirements and Grade Distribution in the Subspecialty and Specialty Areas in the U. S. Navy, 17 December 1964, (Combs Board).



their specialty. Subsequent duty would require two tours in the subspecialty area. A system to identify the specific billets requiring subspecialty education was implemented by BUPERS Instruction 1211.3 of 26 August 1960. To designate the subspecialty billets and expertise, a 4-digit P-code was assigned to each area. Policy was established that, where possible, URL officers with a subspecialty be assigned to such billets when assigned ashore.<sup>11</sup>

Throughout the 1960's, the tasks related to subspecialty management received attention in an effort to improve the system. The Navy Officer Subspecialty Billet Identification System is addressed in OPNAV Instruction 1211.6D. The Professional Manpower Management Unit (PMMU), under the direction of the Assistant Deputy Chief of Naval Operations (Manpower), is charged with the following responsibilities:

1. Determining the Navy's current and future subspecialty billet requirements.
2. Providing direction to the management of subspecialty billets.
3. Establishing subspecialty billet priorities to optimize utilization of professional manpower resources.
4. Developing the annual Subspecialty Billet Requirements Plan upon which the Chief of Naval Personnel can base the input of officers to the postgraduate programs to meet the future professional manpower needs of the Navy.

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<sup>11</sup>Ibid.

<sup>12</sup>OPNAVINST 1211.6D of 8 January 1973.



The PMMU is also known as the Subspecialty Requirements Coordinator (OP-01BE).

Within BUPERS, Pers-B4 is the Subspecialty Personnel Coordinator. He is tasked with the responsibility of ensuring optimum utilization of subspecialty assets. A third level of subspecialty management is the Curricula Coordinator (OP-933). He oversees all postgraduate education in the Navy. Subspecialty Consultants are the lowest level of the subspecialty management hierarchy. These Washington area headquarters activities represent the major user(s) of the subspecialty assets in the Navy. They provide advice and assistance to the coordinators to achieve the subspecialty management goals established by the Chief of Naval Operations (CNO). One of these subspecialty consultants is designated by CNO as the primary consultant (described in Chapter I) to serve as a single point of contact for the coordinators. The Subspecialty Consultants for financial management, in addition to the primary consultant, OP-090, include the Comptroller of the Navy (NAVCOMPT), Chief of Naval Material (CHNAVMAT), Commander Naval Supply Systems Command (COMNAV-SUPSYSCOM), Commander Naval Facilities Engineering Command (COMNAVFACENGCOM), and Director, Fiscal Management Division, Office of the Chief of Naval Operations (OP-92).

One of the purposes of the subspecialty management organization is to ensure that officers are properly coded in order to provide the correct assets to fill the subspecialty billets. This organization is an integral facet of the





Operational Technical Managerial System (OTMS) established in 1973 by the Chief of Naval Personnel. Technical and managerial expertise along with operational professional development is provided to naval officers through OTMS. It also reinforces the Subspecialty Program by establishing the category of Proven Subspecialist for top performing officers in each subspecialty area. This designation is looked upon as similar to command screening in the operational areas.<sup>13</sup>

Most recently the Bayne Committee completed a study of officer education and recommended sweeping changes in both the educational philosophy and subspecialty coding policy of the Navy. As a result of the Bayne study there may be less of a requirement for full-time graduate education and an increase in the non-traditional, part-time, off-duty education of officers. Billets are being designated by the PMMU and BUPERS which require specialty training, but less than a masters level of education. The thrust of the study recommendations is to increase the benefits of education for less money while meeting the continuing Navy need for qualified subspecialists. A new proposed coding system will make it easier for detailers to order the subspecialist to the appropriate billet during the shore rotation cycle, thus alleviating one of the major problem areas of the old system: poor utilization of graduate educated subspecialists.<sup>14</sup>

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<sup>13</sup>Ibid.

<sup>14</sup>Report of a Board to Study Officer Professional Development 31 May 1974, Executive Summary and Chapter III. (Bayne Study)





There are currently over 300 billets in the Navy which require a financial management subspecialist. (See Appendix C) To fill these billets and maintain a supply of qualified personnel, the Navy has two major programs. The Navy Graduate Financial Management Program at The George Washington University provides one portion of the input, and the financial management program at the Naval Postgraduate School provides the other. Following graduation, Navy financial management subspecialists are earmarked for future assignment with a subspecialty code (P-code). Current Navy policy plans for maintaining 2.5 officers with graduate education for each P-coded billet.<sup>15</sup> Ideally each graduate educated officer should be utilized at least twice after graduation as a subspecialist. Unfortunately, many officers have never been required to use their education in a designated billet. This situation is being closely scrutinized at various high levels and should improve rapidly if Navy graduate education is to continue in its present form. The advent of the 837 curriculum should help to improve this situation.

As fiscal constraints grow, the need for strong expertise in financial management will, in the opinion of the authors, be felt at more and more levels of command, thus opening opportunities for the designation of new P-coded billets for junior officer subspecialists to supplement the billets now

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<sup>15</sup>Assistant Deputy Chief of Naval Operations for Manpower (OP-01) Memorandum of 29 February 1972, Report of the Forecast of professional manpower requirements in the field of Financial Management.



primarily filled by senior officers. In recognition of this need, a number of billets for junior officer financial management subspecialists have been recently designated.<sup>16</sup> The emphasis on junior officer billets is also a necessary step to ensure that senior officer financial managers have had prior financial management experience. The status of the role of the subspecialist must, in the opinion of the authors, rise in the future in order to increase the desirability of the billets and solve the perceived promotability problems of the officers. Neither of these areas presently enjoys a high level of success; this serves as a detriment to Navy financial management.<sup>17</sup>

#### C. MARINE CORPS REQUIREMENTS

As of September 1974 the Marine Corps had 470 billets designated to be filled by officers graduated from post-graduate schools; of these, 52 were designated as financial management billets. The vast majority of these billets were filled by field grade officers--a fact which recognizes Marine Corps policy that financial managers should have previously had broad command and staff experience. The desirable inventory of "special education" officers is based

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<sup>16</sup>Interview with LCDR James Miller, USN, BUPERS (Pers 402), 26 November 1974.

<sup>17</sup>Financial Managers Survey 1973, Director, Fiscal Management Division, Office of the Chief of Naval Operations.



on 2.5 officers per billet; this base allows for rotation, overseas tours, and alternating assignments.<sup>18</sup>

The Marine Corps has two programs for qualifying its officers to meet special education requirements: the Special Education Program (SEP) and the Advanced Degree Program (ADP). Both programs are limited to those courses of instruction which fulfill "special education" requirements. All participants in the program are volunteers; selection and assignment to the participating educational institutions are determined by selection board action. All selectees are assigned to designated programs, i.e. Management, Aeronautical Engineering, etc. In the case of Management selectees, pre-designated options may or may not be specified. The Special Education Program includes the Naval Postgraduate School and The George Washington University, the primary sources for financial managers, as well as a limited number of other civilian institutions. The Advanced Degree Program allows attendance at any sanctioned institution of higher learning, provided it meets the Marine Corps needs. The officer concerned, however, must bear the cost of tuition.

Upon successful completion of postgraduate schooling, the officer is assigned a new Military Occupational Specialty (MOS) code, the equivalent of the Navy's P-code. Immediate assignment to a utilization tour is mandatory upon graduation in all cases except for those officers scheduled for an

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<sup>18</sup>Interview with Major T. Miner, Headquarters, USMC, 28 August 1974.





unaccompanied overseas tour of duty. In that case the officer's utilization tour is suspended until completion of the overseas tour. Subsequent tour assignments are handled on an alternating basis, that is, a utilization tour followed by assignment in the officer's primary MOS field. Current policy generally prohibits successive tours in financial management billets.

#### D. SUMMARY

Both the Navy and Marine Corps recognize the need for subspecialists with technical and managerial expertise to fill certain billets. In the area of financial management the importance of the expertise of the subspecialists is underscored by current fiscal constraints. The Navy and Marine Corps are continually striving to improve the effectiveness of their financial managers through more judicious subspecialty management.

### III. THE PRIMARY CONSULTANT

#### A. INTRODUCTION

The external portion of the financial management program is overseen by the Director, Naval Program Planning, Office of the Chief of Naval Operations (OP-090), as "primary consultant" to the financial management subspecialty. This chapter will look at the role of the primary consultant and seek to identify ways to improve his impact on the NPS financial management program.





## B. INTERVIEWS WITH CURRICULAR OFFICERS

To better understand the role of the primary consultant, interviews were conducted with seven Curricular Officers at the Naval Postgraduate School. The interviews were designed to determine the ways that the various primary consultants or their representatives carry out their functions.

A brief description of the mission and functioning of the Curricular Office is considered appropriate at this point. The Naval Postgraduate School Organization Manual describes the Curricular Office as follows:

The Curricular Office is an organizational entity unique to the Postgraduate School. It supports the School's mission and objectives by developing, maintaining, and updating curricular programs to accommodate both Navy needs and academic requirements. 19

The Organization Manual elaborates on the specific function of the sponsor (primary consultant) liaison:

The Curricular Officer-Academic Associate team shall work with program sponsors to define pertinent Navy needs including professional objectives, delineate projected utilization of program graduates and consult with Department Chairmen to propose useful new educational programs. These plans and projections shall consider the impact of changing missions of the Navy. They shall be prepared in writing, each to cover a five-year period, and be reviewed and updated during the annual sponsor review of the programs. 20

As expected, the interviews recorded considerable differences between the actions of one consultant and another. By synthesizing the information in the interviews the authors

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<sup>19</sup>Naval Postgraduate School Instruction 5000.1G of 15 April 1971.

<sup>20</sup>Ibid.



were able to determine the functions required of an effective primary consultant and various alternative means of carrying out these functions. The following paragraphs will address these functions, review the current situation in the financial management program and identify possible areas for improvement.

## C. FUNCTIONS OF THE PRIMARY CONSULTANT

### 1. Billet Requirements

One of the main concerns of the primary consultant is the validation of billet requirements in his subspecialty. This validation includes not only determining the billets which require special education but also recommending what areas that education should cover. Essentially, this function is a continuing one. The consultant must keep abreast of the changes in the Navy requirements and work to alter his billet structure accordingly.

Some consultants provide periodic listings of billets and requirements to members of the subspecialty community as well as to students to assist them in preparing preference cards and career plans. In most of these cases the primary consultant is the primary user of subspecialists, which considerably simplifies the process. The financial management consultant does not have this advantage. Recent conversations with the consultant indicate that effort is continually expended to provide such a listing. A listing of billets was completed in September 1974. However, distribution of this list has not been wide, nor has any statement of various billet requirements been forthcoming. In the opinion of



the authors, attention to these deficiencies seems warranted to improve the service of the consultant.

## 2. Curriculum Review

A logical follow-on to the first consultant function is a process to review the curricula of the educational institutions based on billet requirements in the Navy. This function is, in fact, a requirement of the Chief of Naval Education and Training (CNET). There seemed to be no one specific method for conducting this review. These reviews are generally conducted by a committee of senior officers on the staff of the primary consultant. Some consultants conducted on-site reviews at NPS; others remained in Washington. Some conducted lengthy (2-3 day) in-depth reviews; others conducted shorter (1 day) reviews of a far less rigorous nature. In any event, the Curricular Officer-Academic Associate team provided the input of course material for review, and in many curricula, minor changes and new courses were developed.

In the opinion of the authors, possible alternative plans for this annual review focus on location and depth. One plan would call for annual in-depth reviews to be conducted at NPS. Ideally the primary consultant would be present to receive the committee report. This plan would reinforce the interest of the consultant in the curriculum, keep the school abreast of recent changes in the Navy financial management area, and afford the consultant an opportunity to interface with his prospective subspecialists,





and vice-versa, on an annual basis. A second plan would call for annual reviews at the Washington activity of a variable depth. The shortcoming of this plan is the disruptive environment of Washington. Board members might not be able to devote full attention to their review because of other demands on their time. They are also limited by the lack of access to students, professors, and classes. A compromise review plan seems to offer several advantages. A review cycle would be established in which the curriculum would receive an in-depth, on-site review on a biennial or triennial basis. In the off years a cursory review by the primary consultant would suffice and should be conducted at NPS, but could be held in Washington, if necessary. In any event the consultant or his representative should attempt to visit the school annually to reinforce his liaison position and update the faculty and students on recent developments in the subspecialty community. Above all, the process must be an active one in which the consultant and the Curricular Officer maintain a high level of communication.

The current review process for the financial management curriculum, in the opinion of the authors, is far from satisfactory. The present review policy seems founded on the premise that no action is the best action. Such a policy may be the result of the fact the 817 curriculum had several primary consultants, including OP-090, BUPERS, and the Chief of Naval Material, with an "interest" in the curriculum, but no one agency had primary responsibility for





the total curriculum review process. Hopefully, the onset of the 837 curriculum will generate an active review policy by the consultants. With the financial management curriculum now separated from the other management curricula, OP-090 has the opportunity to more clearly focus on his responsibilities as primary consultant. A more active policy will serve to keep students and faculty informed of recent developments in the financial management community and provide for the update of courses in the curriculum as necessary.

### 3. Subspecialty Staffing

Another of the tasks of the primary consultant, in conjunction with BUPERS, is the coordination of billets and bodies, that is, ensuring that there are an adequate number of P-coded officers to fill the billets. Until recently the consultant's control over the NPS source of P-coded financial managers was almost nonexistent.<sup>21</sup> Officers were ordered in to the 817 curriculum and then allowed to choose their areas of subspecialty without external control. Now, with the advent of the 837 curriculum, the consultant can identify his input as well as output. This affords an opportunity for more coordination between the consultant and BUPERS to match NPS students with billet requirements upon graduation. The end result of such improved coordination would be more adequate staffing of key subspecialty billets

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<sup>21</sup>Interview with LCDR John Brunelli, USN, Fiscal Management Division, Office of Chief of Naval Operations, 20 November 1974.



with qualified personnel and better overall management of subspecialist assets.

The primary consultant has recently compiled an up-to-date list of Naval officers with financial management P-codes. The updating of this list is an ongoing project which requires the coordination of BUPERS and the consultant. The OTMS program underscores the importance of this function by directing an annual review of all financial managers to select Proven Subspecialists. The consultant helps to provide the input to this review.

#### 4. Graduate Utilization

The coordination between the consultant and BUPERS has been cited as important for controlling inputs and determining outputs of the financial management curriculum. Perhaps the area requiring the greatest coordination and possibly the most critical area in terms of the current environment of defense cutbacks is that of graduate utilization. The poor performance of the Navy in this area is in sharp contrast to that of the Marine Corps. For many years the Marine Corps has controlled the utilization of graduate educated officers by means of a Special Education Monitor. His function, among others, is to track all graduates until they have served a payback tour in their subspecialty. The Navy has no such unified control, possibly because of the difference in relative sizes of the groups to be controlled. Instead the Navy passes this responsibility, and it has been less than a strictly enforced responsibility, to BUPERS



detailers. The degree of coordination between detailers and consultants seems to vary with the subspecialty. Where the subspecialty consultant is also the primary user of the subspecialists, such as Naval Sea Systems Command for Naval Engineers, or where the subspecialty is also a specialty, such as meteorology for 181X designated officers, the consultant's relationship with BUPERS seems much stronger in terms of utilization record. Unfortunately, not all consultants have either of the above advantages. In the case of financial management, the BUPERS coordination has been unofficially described by representatives of both BUPERS and the primary consultant as poor at best. The current political attitude toward graduate education indicates to the authors that improvements in this area are needed if the Navy is to continue to have graduate educated financial managers. Force reductions can further compound the problem by creating a situation where communities are competing for the use of scarce personnel assets, for example, where to best assign an aviator with a financial management subspecialty in the light of personnel cutbacks. This impression leads the authors to the conclusion that improved utilization of Navy graduate educated officers is mandatory. Fortunately, this need is also recognized at the Washington level and improvements are in process.

Another factor which complicates the utilization problem is the inverted structure of available billets. As of September 1974, 80% of the designated P-coded financial





management billets were for commanders and above. At the same time 46% of the P-coded financial managers were lieutenant commanders and below. (See Appendix C) One problem with the inverted billet structure is that many junior officers are unable to serve in P-coded billets in either the first or second tours of duty subsequent to graduation. This shortcoming deprives the Navy of the services of graduate educated financial managers and also limits opportunities to improve its poor utilization record. The junior officers also suffer from the scarcity of P-coded billets. Without the training and experience of such duty within five years of graduation, their chances of becoming Proven Subspecialists are greatly reduced. In these times of ship and squadron decommissionings, the standard operational routes to successful Navy careers are being closed to many prospective career officers. The acquiring of a Proven Subspecialist designation, created by the OTMS program, opens another road to long productive careers.

Without the opportunities to reinforce the theoretical experiences of the classroom with practical on-the-job experience, the value of an officer's education is greatly diminished. An attempt to rectify the unsatisfactory situation described above is currently underway. In a joint effort, the primary consultant and BUPERS are in the process of designating about 60 additional P-coded billets for junior officers with hopes of additional future gains. The



designation of junior officer P-coded billets raises the question of immediate payback tours for junior officers. The rationale of immediate payback tours for junior officers is not impractical. The current sea-shore rotation policy of the Navy calls for alternation every  $2\frac{1}{2}$  to 3 years. The 837 curriculum is 18 months or less in length. A two year assignment to a P-coded billet after graduation would only keep an officer ashore for  $3\frac{1}{2}$  years. If the officer came to graduate school from shore duty, the payback assignment could wait for 2-3 years of sea duty. The important point is that with a greater balance of billets, the needs of the Navy and the officers can better be served through early payback tours.

#### 5. Continuing Responsibility to Graduates

The responsibility of the primary consultant for the graduates of his various programs should not be limited solely to staffing considerations. Although the Navy neither wants nor needs a corps of financial management specialists, the 9410 P-code (just as a 1310 designator) denotes an individual with a special background. Aviators have numerous magazines and other professional publications. Financial managers have a few, such as Armed Forces Comptroller, but none solely for the Navy. The primary consultant, from his Washington office, should be a focal point for communication within the financial management community. A quarterly newsletter concerned with the problems of financial management and new developments in the field augmented by a current



billet listing would, in the opinion of the authors, be very beneficial to all financial managers. This forum would serve as a medium for exchange of ideas and information within the community. Such an endeavor would serve to enhance the status of the community within its own ranks in addition to being a great asset in career planning.

#### D. SUMMARY

In the opinion of the authors, the emphasis on the role of the primary consultant in the financial management subspecialty should be expanded in several ways. First, information regarding billets and their requirements in the financial management community needs wider and more frequent dissemination. Second, an active curriculum review policy administered by the consultant should be developed to ensure academic relevance to the Navy. Third, the degree of coordination between BUPERS and the consultant must be improved to ensure adequate staffing of the financial management community and a high level of graduate utilization. The development of more junior officer P-coded billets is a means to these ends. Finally, in order to provide some cohesion to the financial management community, some form of regular communication, such as a magazine or quarterly newsletter, should be considered by the consultant.

The role of the primary consultant could easily be a demanding full time occupation. Implementation of these recommendations could significantly contribute to correcting existing shortcomings in the leadership of the financial





management community. Improvement of existing conditions will require concerted efforts of all concerned, and with the onset of the 837 curriculum, such improvement is re-emphasized and made easier to accomplish.

#### IV. STUDENT NEEDS AND DESIRES

##### A. INTRODUCTION

Student 'needs' include both psychological and educational needs. Psychological needs provide motivation for student learning and prescribe certain conditions that academic institutions should take into account in attempting to stimulate the educational process. Educational needs represent something one ought to learn for the good of himself, his organization, and society in general. 22

In trying to determine these needs of the student, the authors have relied on several sources of information. First, informal discussions were held with the members of several sections of NPS management students. Second, as students themselves, the authors have formed their own opinions based on personal observation and experience. Third, interviews were held with several faculty members regarding their perception of student needs.

While findings in this area represent a somewhat subjective, as opposed to objective, assessment of the situation, the findings are considered an integral part of this study. The analysis of the financial management program would be necessarily incomplete without some evaluation of student

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<sup>22</sup>Knowles, Malcolm S., The Modern Practice of Adult Education, Association Press, 1972, p. 87.





perceptions and attitudes. Many of the comments that follow may well appear to be generalizations, but in keeping with the authors' stated objectives, this thesis strives to identify and record problem areas within the financial management program and, if possible, present recommended solutions. If problems are only identified (even without solution), it will still provide a starting point for a more refined process of subsequent analysis.

The indoctrination experience of the authors, while an isolated example, will serve to explain a representative orientation process upon reporting aboard. Officers reporting to the 837 curriculum are normally grouped into "sections" of 20-25 officers. This administrative group will progress through the 18-month curriculum together. Shortly before the onset of the authors' first academic quarter, their section was gathered for an orientation lecture. This amounted to little more than a welcome from the Curricular Officer and comments on the dress code and other administrative requirements of NPS, Monterey. Information regarding specific schedules, grading systems, student-professor relationships, and overall curriculum structure was also presented. The entire process was conducted in less than an hour. There was a distinct lack of concern for personal academic requirements, although such personal attention would undoubtedly have been available if requested.



## B. COUNSELLING

At many academic institutions, such as Harvard and Michigan State University, new graduate students are assigned a guidance counsellor of some sort to assist them in structuring their programs and advise them on their educational problems.<sup>23</sup> The experiences of several NPS faculty members indicated that such catalog-advertised policies were often far removed from actual practice. Nonetheless, it is the opinion of the authors that no effective counselling system exists at NPS.

The students at NPS, for the first two quarters of the 837 curriculum, take no electives so the only problems that normally arise center around validation of required courses. Validation is the process by which students demonstrate they possess the knowledge of the material to be covered by a particular required course and are thus exempted from the requirements of that course. Current OR/AS Department policy encourages validation. Potential benefits of validation include increased options for elective courses or even early graduation. This policy is not eagerly accepted by students for several reasons. First, validation of a course provides credits for that course but no grade. Not unlike other student groups, the NPS students compete for grades. The competition is made more intense in the management curricula by the inclusion of grades in the annual fitness report, or

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<sup>23</sup> Graduate School Catalogs of Michigan State University and Harvard University, 1973-4.



officer performance evaluation. If an officer is sufficiently skilled in an area to validate a course, he is likely to be capable of obtaining a high grade with a limited amount of work. In view of the competition for grades, it could behoove the officer to opt against validation. Secondly, the tour at NPS is shore duty. Graduation in less than 18 months might mean earlier reassignment to sea duty and more family separation. Avoiding validation opportunities seems practical from that standpoint. Finally, there is a lack of personal guidance on the alternatives offered by validation. It has been the experience of the authors that validation is only discussed in passing by professors offering validation examinations.

The final four quarters of the 837 curriculum offer several opportunities for elective courses. Elective course choices are generally made on the basis of informal feedback from preceeding classes about course content and professor capabilities. Formal communication of the relative merits of the various electives from either faculty members or the administration is lacking. This requires that the students rely almost exclusively on the informal system which may not be effective in providing students with the correct information.

The last two quarters of the program are designed to include thesis work. Despite several lengthy lists of vague subject area titles offered by the primary consultant, the selection of a thesis topic can be quite difficult. Inasmuch





as the student has no faculty advisor nor any real knowledge of the background and interests of the faculty, the student is forced to independently seek out a professor who might supply the information or judgement necessary to confirm, or generate, as the case may be, a thesis topic. This process of linking an area of student interest with a knowledgeable and interested faculty member, to serve as thesis advisor, is often a long one. The problem could be partially solved by providing the students with a listing of faculty members and their fields of interest, to supplant the listing of topics from the primary consultant. The decision process should be greatly improved by this additional information. Participative management schemes, such as management by objectives, stress the value of individual objective setting to actual performance. The involvement of the student in determining a thesis topic can be greatly increased by improved personal guidance. The benefits, in terms of meaningful thesis work, can be enjoyed by both the officer and the Navy. The medium for this improved guidance could easily be the Curricular Officer.

The largest single desire of NPS students in the 837 curriculum is, in the opinion of the authors, for a workable, effective system of personal guidance. The responsibility for providing this guidance rests in several places: the Curricular Officer, the Department Chairman, the Academic Associate, and the newly appointed Curriculum Coordinator. The Department Chairman and the Academic Associate represent



the academic side of the house. They have the educational background to provide some of the guidance desired, but oversee the entire OR/AS Department and all Management Curricula respectively. The combined problems of several curricula and too many students to handle on an individual basis serve to reduce the sphere of influence of the Chairman and Academic Associate as guidance counsellors. The following paragraphs will examine the roles of the Curricular Officer and the Curriculum Coordinator as guidance counsellors.

### C. CURRICULAR OFFICER

In addition to the information gained from the Curricular Officers about primary consultants, the interviews conducted by the authors facilitated the recording of some observations and impressions about the function of the Curricular Office/Officer. As with the relationship of the Curricular Officer to the primary consultant, several different methods of operation were noted. This, again, was to be expected.

As the formal military point of contact for students, the Curricular Officer should be a strong, dynamic individual who is a "go-getter" and "up-and-comer." If the school is to project an image of true interest in the officer-student, in terms of both personal and academic development, it is imperative that the point of contact be a positive influence. The Curricular Officer is, for better or worse, an important influence on student performance. If he is perceived as a marginal performer, or worse, one that is reluctant to take action, the student is more apt than not to develop a

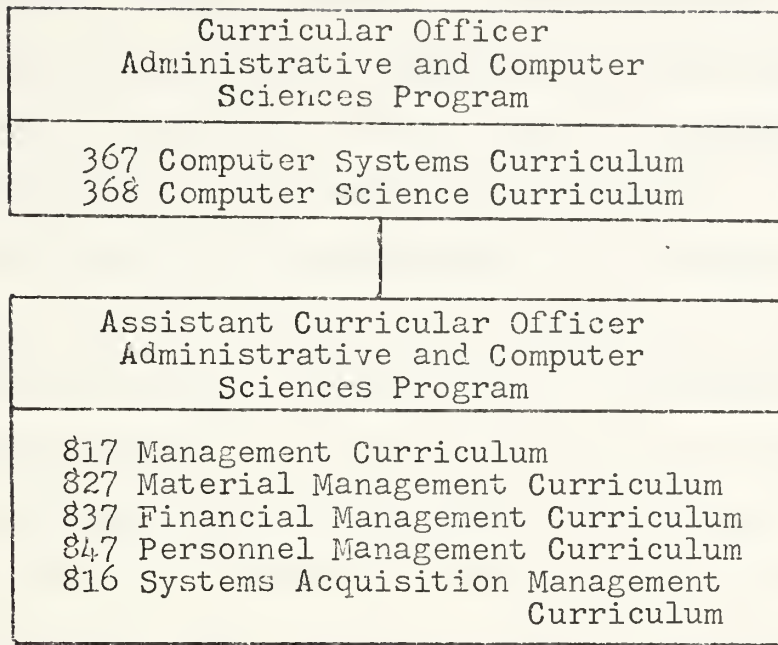


negative attitude toward the school. Exemplary leadership is often an impetus to improved performance throughout an organization. Likewise, an inept leader can breed substandard performance. While the Curricular Officer may not directly effect the academic performance of a student, his perceived leadership ability will certainly effect student attitudes. When coupled with other happenings and pressure during the school cycle, poor leadership could produce a real sense of dissatisfaction on the part of the student. This, in turn, can produce a reduction in the value of the education received, as well as a basis for a negative endorsement of the school to acquaintances within the fleet. The point is that the opportunity for such a possibility should be minimized, if not removed, by ensuring that only top performers become Curricular Officers.

Before attempting to list the desired characteristics or qualifications of the 837 Curricular Officer, it must be noted that this officer is also the Curricular Officer for the 816, 827, and 847 curricula. This is no particular problem as several of the Curricular Officers interviewed were responsible for more than one curriculum. A problem that does exist is in the current relationship between the 837 Curricular Officer, who is actually the Assistant Curricular Officer for Administrative and Computer Sciences, and the Curricular Officer for Administrative and Computer Science Programs. The organization chart below depicts the curricular responsibilities of these two officers.







The Administrative and Computer Science Curricular Officer has nominal control over both the management curricula and the computer science curricula. In practice, however, the chain of command is unclear. The 837 Curricular Officer exercises "official" control over the program, yet this control is not total. For example, the Administrative and Computer Science Curricular Officer retains the responsibility for submitting student fitness reports. Further, he is a more senior officer than the 837 Curricular Officer. It is the impression of the authors that the existing relationship creates an atmosphere of uncertainty for the student in his dealings with these two officers. Such an arrangement apparently exists as a holdover from the previous 817 program, under which the Assistant Curricular Officer was "responsible" for the financial management program. In order to clear up vague relationships and to establish a single





point of contact for the student, it is recommended that the 837 Curricular Officer be separated from the Computer Science Curricular Officer. (Such a plan is currently under investigation by the NPS administration.)

A critical phase of the management of any organization is staffing, that is, the process of filling each billet with a person having the right qualifications. The Naval Postgraduate School Organization Manual describes the necessary qualifications for the Curricular Officer billet as "suitable experience and rank." Suitable experience is construed by the authors to mean both educational and practical familiarity with at least one of the subspecialty areas related to his curricula. Suitable rank is construed to mean a rank which would provide a margin of seniority over most students. Consideration of these requirements in filling the Curricular Officer billet would have several ramifications. First, as an experienced subspecialist (although not necessarily a Proven Subspecialist), the officer could relate to the curricula problems in a knowledgeable manner. Second, his relationship with the staff of the primary consultant would be as a professional peer, possibly facilitating more productive contact. Finally, as an experienced naval officer and subspecialist, he could provide valuable guidance to students on matters of academic and professional concern.

Of the previously listed functions of the Curricular Officer, the function of counselling is the one that has the most direct impact on the student. Our interview process



revealed that most of the curricular officers had an active counselling system. Such an arrangement is obviously a product of the Curricular Officer himself. Unfortunately, we believe that the communication process between the Curricular Officer and the student in the financial management program is not nearly as strong as that found in the other curricula. There has been no attempt made to make the process a personalized one, one with which the student can readily identify, perhaps due to the large number of students.

The efficient management of any production process depends on effective two-way communication between workers and managers. The education of officers at NPS is a type of production process. Unfortunately, in the opinion of the authors, the communication process between students and the Curricular Office is neither effective or two-way. Full section briefings, infrequent as they have been, and the duty bulletin board have been the standard means of disseminating information to the student. No where has there been an attempt made to talk to the student on a regularly scheduled, individual basis, such as a basic and brief "welcome aboard" session or a quarterly academic review session concerning past performance and future plans. If no problems are encountered, communication is close to nonexistent. Management by exception, however, is practiced quite extensively concerning marginal academic performance. For example, should the grade point average fall below the expected standard, the name of the offender will promptly



appear on the duty bulletin board with the message to report to the Curricular Officer. An overall more personalized communication process can and should be implemented, whereby the student is counselled on a basis more in keeping with the meaning of the word "counselling" as used in an academic environment. Such counselling would serve to greatly improve mutual student-curricular office understanding through more effective communication.

An "entrance" interview conducted sometime just prior to or immediately following the start of the first quarter may pay some dividends. In addition to the first hand information the student would acquire about the school, its procedures, and what is expected of him, the process of course validation could be fully explained.

The stated duration of the 837 curriculum is four to six quarters depending on the student's ability and background. By validating courses it is theoretically possible for the student to graduate in 12 months instead of the normal 18 months. One of the problems with this validation process is, as previously mentioned, that no one at the school sits down with the student to really explain the process nor to review his academic background, such as degree, field of concentration, grades received, last year attended school, and similar items, against the specific requirements of the curriculum. This personalized records review will not necessarily materially reduce the average number of students on board through validation. It will,





however, set in motion for the student, whether or not he validates courses, a much clearer understanding of how his educational undertaking will be structured.

#### D. CURRICULUM COORDINATOR

Inasmuch as the 837 Curricular Officer is also responsible for other curricula, it is probably asking too much of him to hold a detailed review as contemplated by the general process described above for every new student under his purview. Further, he may not be equally well-versed in all of his curricula as they pertain to student options, questions, problems, and qualifications. To fill the gap between the Curricular Officer/Academic Associate and the student, a military faculty member has been recently appointed by the Department Chairman to act as the financial management Curriculum Coordinator.

As an instructor within the school, as well as a member of the financial management community, he could provide both the personal attention and the expertise necessary to guide graduate students. By screening academic transcripts of incoming students and tracking their progress, the coordinator can provide the knowledgeable, personal guidance the students need. Working with all the 837 students, the Curriculum Coordinator can provide a valuable input to the Department Chairman to help scheduling of appropriate courses to offer each student an opportunity to take the courses of his choice.

The counselling effort by the Curriculum Coordinator, in addition to a revitalized and more active effort on the



part of the Curricular Officer should create an atmosphere within which the student is confident that he can receive timely, relevant information about his educational process.

#### E. CURRICULUM CONTENT

Based on interviews of a number of students, a second pressing need or desire in addition to personal guidance is a solid program of courses which offer the most meaningful education possible: meaningful to students in terms of relevance to the military and to subsequent civilian life. To reinforce this relevance, practical application of classroom theory needs to be addressed. For example, frequent dissatisfaction arises with the various mathematical courses offered to management students; the relevance is a very cloudy issue. Closer faculty coordination between subjects could help to clear this problem area by frequent citing of applications of one course to another, such as the use of differential calculus in economics, or the use of psychology in personnel management. This cross referencing would help to reinforce the material being taught in both courses.

Many of the 837 students are unsure as to their future assignments. This reduces the feasibility of tailoring programs specifically to future assignments. In the absence of perfect knowledge of future assignments, most students desire a more broad brush treatment of many subject areas in the financial management field as opposed to specialized education in any one area of financial management.



As an exception to the proposition concerning non-specialization, it is the opinion of the authors that Navy financial management deserves special emphasis. The world in which the Navy manages its finances is somewhat different than the one in which, say, General Motors operates. Any program of financial management for naval officers should contain at least one Navy-oriented course designed to familiarize students with the many facets of financial management in the Navy. The naval officer must be exposed to the potential problems he might face, both technical and political, to increase his ability to handle them in practice.

#### F. SUMMARY

The needs and desires of the students of the 837 curriculum, although difficult to statistically verify, are an important consideration in the analysis of the financial management program at NPS. The primary desire of most students seems to be related to counselling. The current lack of personalized, regular counselling or advising in the 837 curriculum causes dissatisfaction. The improved understanding of the validation process, elective selection procedure, and thesis topic identification, which would result from a more active counselling program, seem to support the recommendation for an improved student counselling program.

One source of such counselling could easily be the Curricular Officer. Current administrative overlap of Management and Computer Science Curricular Office responsibilities partially restricts the implementation of this counselling.



Correction of this problem, coupled with recommended staffing considerations, should lead to a better communication process through counselling.

The multiple curricula responsibility of the Curricular Officer may put severe constraints on the time he can devote to individual counselling for 837 students. To assist him with this important task, the position of Curriculum Coordinator has been developed. The benefits of the involvement of the Curriculum Coordinator as a counsellor can be enjoyed by students, faculty, and administration alike. An increase in the responsibility and formalization of his position is strongly recommended.

The final student desire is related to curriculum content. A generalized, as opposed to specialized, treatment of financial management areas with emphasis on the practical aspects of Navy financial management is seen as most beneficial to the future assignments of graduate subspecialists.

The needs and desires of the students seem neither impractical or unreasonable. More important, their fulfillment seems easily assured with only minor changes to the existing organization. The benefits of better long range graduate support and possible superior student performance support these changes.





## V. SERVICE NEEDS

### A. BACKGROUND

The basis of any service connected educational program, especially full-time, fully-funded graduate education such as that at NPS, must be to meet the specific needs of the service. Consequently, the fundamental problem confronting designers of such a program is the identification and prioritization of the needs of the service.

The identification of service needs in the area of financial management poses a particularly difficult challenge because of the wide variety of decentralized financial/resource management billets. This broad spectrum of activity includes the use of revolving, appropriated and nonappropriated funds. For example, the Navy is involved in a substantial quantity of commercial-type activities, from shipbuilding and repair to operating a retail store system. The management of the resources of these activities is necessarily decentralized, which places the management burden throughout the organization from the top to a low level. Without adequate educational or practical background in the area of financial management, the continued fiscal successes of the above activities could be placed in jeopardy. The provision of this background is the primary concern of the service in the graduate education process of prospective financial managers.



The general structure of the financial management program should depend on the specific topical requirements of Navy financial managers. These requirements, however, may differ from one financial management billet to another. For example, the background needed to deal with civilian contractors in evaluating a contract proposal pending award may be quite different from that needed by a comptroller at a shore activity. " . . . The general objective of the Management related curricula should be the development of professional capability of Naval officers."<sup>24</sup> This capability in the financial management area should enable the graduate to handle any of a wide range of subspecialty billets. To meet these objectives, the program should be far-sighted enough to recognize future problems and developments out to a five year horizon. This five year horizon should form the basis for future curriculum changes and provide ample opportunity for all graduates to be utilized in the subspecialty within the first two tours after graduation ensuring that their education is current. Given this scope, the program should be frequently updated to ensure overall currency.

#### B. IDENTIFYING SERVICE NEEDS

Since the needs of the service form the basis for the curriculum, it is necessary to determine the specific needs of the Navy for financial managers, i.e., what are the financial managers doing and what management tools should be

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<sup>24</sup>Pound's Report, op. cit.



provided to them by graduate education. There are basically three techniques that can be applied to determine the Navy's financial management needs: 1. A general questionnaire sent to all financial managers requesting specific information on the needs, 2. The use of the Delphi technique where several experts in the financial management field are asked to identify specific needs from which a collective iterative process develops the needs, 3. The use of an in-depth task analysis of a variety of financial management billets by qualified analysts.

In July 1972, the Director, Navy Program Planning (OP-090) became the advisor for the financial management subspecialty. To develop a data base for the advisor, the Fiscal Management Division, Office of the Chief of Naval Operations, conducted a financial management survey in the spring of 1973. The objective of the survey was threefold: 1. To determine the utilization of designated financial management subspecialists, 2. To determine the needs of financial managers, both professionally and academically, that is, to determine those qualifications an individual must possess in order to become a successful naval officer and financial manager, and 3. To assist the subspecialty consultant in providing better guidance to the financial management community.

The questionnaire method of data collection was utilized. At that time there were some 225 designated financial management subspecialists in the Navy. Two-thirds of those polled responded and the following are some of the general conclusions that were reached:





1. Utilization of NPS graduates in their first or second tour subsequent to graduation was less than 50%.
  2. The financial management subspecialty was becoming rather unpopular among its members because of a perceived poor promotional record and what was termed "overspecialization" at the expense of the primary specialty of the officers.
  3. There is a lack of guidance in the financial management subspecialty regarding the relative career enhancement values of possible future assignments.
  4. A greater emphasis on the application of financial management in the Navy is needed in the curriculum to better prepare officer graduates for duty in their subspecialty.
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These findings corroborated the problems perceived by the authors and supported by interviews. Only the lack of courses dealing with Navy related aspects of financial management in their curriculum concerned the graduates. This implied satisfaction of graduates with their overall graduate education indicates the curriculum also meets the general educational needs of the service. Solutions to the first three problem areas identified above have been discussed in Chapter III. This questionnaire, while valuable in terms of information gained about the mood of the subspecialty community, did not provide sufficient detail to assess the financial management curriculum vis-a-vis service needs.

Every two years the Professional Manpower Management Unit (PMMU) within OP-01 develops a Forecast of Manpower Requirements by subspecialty. The basis of this report is a modified Delphi technique: a sample of experts in the subspecialty are polled as to their expectations of growth of subspecialty

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<sup>25</sup>Financial Managers Survey 1973, op. cit.



billet needs. While the results of the forecast are of little value in designing specific curricular needs of the service for its financial managers, it does provide some baseline for anticipating future student loads.

The third method, although not currently used in the Navy, could be of value in deriving information about the needs of the Navy, in terms of its financial managers. The in-depth task analysis of a cross section of a variety of financial management billets could assess what is actually done in a specific type of billet and then determine what preparation is necessary for officers to carry out those assigned tasks. This procedure would be most effective in determining specific service needs of financial managers, but is unfortunately prohibitively expensive.

### C. SURVEY METHODOLOGY

To attempt to answer the questions about service needs of financial managers, the authors have taken a little from each of the first two methods described above. A questionnaire was developed for a select group of financial managers; it listed 13 broad management related subject areas and varying numbers of specific topics within each subject area. Each officer surveyed was asked to rank each subject area and topic in terms of importance to naval financial managers. The purpose of including areas other than financial management was to assess the existing required courses in the 837 curriculum in terms of the needs of the service as seen by the respondents.



Several alternatives were available for conducting the survey. First, a sample of the entire financial management community could have been used. This option was ruled out because the same group had been polled in the 1973 Financial Management Survey. A second alternative was a sample consisting of all officers currently in financial management billets. It was decided that many of these officers would be serving in their first subspecialty billet and most would have limited interest or experience in analyzing curricula inputs. Therefore, this option was also ruled out. At the suggestion of several faculty members, it was decided to restrict the sample size to several senior officers in key financial management billets or with strong backgrounds in financial management. Additionally, the proposed sample would contain only officers who had previously exhibited an interest in, and concern for, the program at NPS. Coordination with the 837 Curriculum Coordinator and the office of the primary consultant resulted in a list of 14 officers to be polled. Each officer to be polled was personally contacted to reaffirm an interest in the survey before actual mailing. This selection and prescreening process resulted in a sample of interested, experienced officers, and, significantly, a 100% response.

The group of officers surveyed consisted of three Rear Admirals, six Captains, two Marine Corps Colonels, and three middle and junior rank officers (two from the staff of the primary consultant and one from the Coast Guard). They





represented a wide base of experience in Aviation, Surface Warfare, Supply Corps, and Marine Infantry. An equally broad experience base in the aspects of financial management was also represented. It was felt by the authors that the value of this interest and experience would far outweigh the statistical shortcomings related with the small sample size.

Attempts were made to apply some form of parametric or nonparametric statistical procedure to analyze the data in order to better underscore its significance. Unfortunately, after discussions with several statistical experts on the faculty, no such procedure, other than simple averaging, seemed relevant. Hence, to prioritize the subject areas and topics the rankings of all respondents were summed and averaged. A ranking of "No Opinion" was not included in the averaging. All other ranks carried their numerical weight, with 10 being the highest possible rank. After prioritizing the subject areas and topics (by subject area), each was compared to the required courses and financial management electives of the existing 837 curriculum to determine if the emphasis currently placed on the topic was consistent with the relative importance indicated by the respondents' rankings. Topics or subject areas deemed important by the respondents, but not emphasized by the curriculum as it exists, comprise the bulk of the recommendations for change.





The following is a prioritized list of general subject areas identified in the questionnaire:

1. Financial Management
2. Resource Management
3. General Management
4. Data Processing for Management
5. Economics
6. Quantitative Methods
7. Personnel Management
8. Acquisition (project) Management
9. Behavioral Sciences
10. Procurement and Contract Administration
11. Production Management
12. Political Science
13. Marketing

Within each of these subject areas a number of specific topics were included as a part of the questionnaire. A sample of the complete questionnaire, list of respondents' rankings, and the resulting priorities are found in Appendices D and E.

#### D. FINDINGS, EVALUATIONS, AND RECOMMENDATIONS

The authors have treated the results of the survey as indicative of the needs of the service in the area of financial management, in terms of subject and topical areas. The comparison of these needs with the areas covered in the existing curriculum has resulted in the identification of several possible deficiencies, most notably in the financial management subject area. The following findings and evaluations address those deficiencies. In appropriate cases recommendations are offered to overcome the deficiency and improve the curriculum.

Finding: The financial management subject area is considered the most important area of the 837 curriculum. The



subject area had a mean score of 9.86; the next ranked subject area had a mean of 8.71.

Evaluation: Inasmuch as the survey was sent only to financial managers, i.e., a biased survey population, the resulting ranking of financial management as the most important subject area was to be expected. It is noted that financial management did not receive the maximum rating in each case; in one instance general management was considered more important. Nonetheless, the high ranking of financial management documents the relative importance of financial management topics to the surveyed financial managers as compared to other subject areas and reinforces the need for specialized education in financial management. The primary emphasis of the 837 curriculum should be on courses in the financial management area.

Recommendation: Inasmuch as the 837 curriculum requires that the student complete only three electives in the financial management area, the curriculum should be revised to require additional financial management courses. An increase to four required financial management courses will provide some of the required greater emphasis, yet still allow the student to take a free elective outside the financial management area if he so chooses. This recommendation can be implemented without structural change to the present curriculum.

Finding: Of the three top ranked topics in the financial management area, Planning, Programming and Budgeting Systems



(PPBS) and the Navy Budget Execution Process rank first and third respectively.

**Evaluation:** A strong emphasis on the Navy aspects of PPBS and budget execution is a critical input to any financial management curriculum for naval officers. Such documented feelings from the respondents are in keeping with the great potential of NPS to serve the unique needs of the Navy.

**Recommendation:** As a follow-on to Public Policy Processes (MN 3172), develop a course which would deal with the operation of PPBS within the Navy, to expand the brief overview offered in MN 3172. This area, which is also currently addressed briefly in Financial Management in the Navy (MN 4163), could be combined with an orientation to Navy accounting practices and policies, and an overview of the budget execution process in the Navy to form an informative fundamentals course in naval financial management. The utilization of guest speakers and/or field trips could serve to round out the course. This course should be substituted for the elective course currently offered in quarter four (second graduate quarter) as a required course for all Navy officers in the financial management curriculum. A similar course for Marine Corps, Coast Guard, and Army officers should also be developed.

**Finding:** The topics Financial Analysis and Decision Making and Management Control Systems ranked second and fourth, respectively, within the financial management subject area.





Evaluation: The elective courses Decision Making for Financial Management (MN 4152) and Controllershship (MN 4161) are considered of significant value to naval financial managers. Although the elective courses MN 4152 and MN 4161 deal primarily with the private sector rather than the Federal or Navy sector the theory and techniques covered are (equally) relevant to Navy Financial Management. Therefore, it is the opinion of the authors that the merits of the techniques taught in MN 4152 and MN 4161 support their importance.

Recommendation: All financial management students should be required to choose either MN 4152 or MN 4161 as one of their financial management electives. Preferably, both should be taken.

Finding: Resource Management ranked second in importance among subject areas. The topics of Resource Management Systems (RMS) and the Navy Operational Management System also were ranked highly in their respective subject areas.

Evaluation: Knowledge of the facets of RMS is important to naval financial managers and exposure to this system and its follow-on improvements are merited.

Recommendation: A capstone course, similar in concept to MN 4163, be developed for all Navy and Marine Corps officers in the financial management curriculum. This course should be a required course, to be taken in the final quarter (in lieu of an elective). The scope of this course would be the wide arena of naval financial management including the historical significance of PRIME and RMS, the impact



of the Financial Management Improvement Program, and the "real world" problems of current Navy and Marine Corps financial managers. Guest speakers, oral presentations by students, and Navy/Marine Corps case study material could be used to enhance the value of the course. The goal of this course would be to make the students more aware of their subspecialty area. This recommendation can be implemented within the structure of the existing curriculum without any alteration. It further serves to enhance the relevance and uniqueness of the 837 curriculum. Officers of other U. S. services and allied services in the financial management curriculum would retain the option of selecting any financial management elective in lieu of this course.

**Finding:** Data Processing for Management ranked fourth in subject area importance.

**Evaluation:** Naval financial managers could benefit from more exposure to computers and their application to financial management.

**Recommendation:** Application of Management Information Systems (MN 4181) should receive greater advertisement and attention as a valuable potential elective for financial management students. Additionally, a course that addresses some of the Naval ADP applications in the financial management area should be considered for development or incorporated into MN 4181.

**Finding:** Personnel Management was seventh in the overall subject area rankings, but a majority of the respondents



commented as to the importance of strong personnel management to successful financial management.

Evaluation: The importance of the personnel management area justifies the personnel oriented courses in the existing curriculum (MN 2106, MN 3101, HG 3002). Although the mean for personnel management is near the middle of the rankings (7.21) of the questionnaire respondents, its relevance to the survey group is explained in other terms. Seven of the 13 respondents ranked the subject area with a rank of 8 or higher; the remainder of the group rated the subject area low because they thought it was generally too late to teach military managers how to deal with people. All of the respondents either rated the area high or commented to the fact that people were the driving force behind any organization. The survey group differed only in its opinion as to whether or not personnel management should be included in the curriculum.

Recommendation: The personnel management courses listed above should be retained in the 837 curriculum.

Finding: The rankings of the major subject areas (excluding financial management) and the topics within each major subject area reflect the emphasis placed on the courses in the existing curriculum which deal with those areas and topics.

Evaluation: The existing 837 curriculum does, in fact, meet the overall needs of the service, as perceived by the respondents.





Recommendation: No additional changes, other than those identified above, should be made, to the 837 curriculum.

In addition to providing the rankings requested in the questionnaire, many respondents offered some very constructive comments. Their statements lend additional support to the survey results. A number of these are considered to be of enough value to reproduce them without further comment (See Appendix F).

#### E. SUMMARY

The fundamental factor in the evaluation of the financial management curriculum at NPS is the recognition of the needs of the service. In order to determine the success of the 837 curriculum in educating naval financial managers, an understanding must be gained as to the needs those managers must fulfill.

Several methods of determining those needs have been utilized in recent years, including a survey of all financial managers in 1973 and a polling of a large sample of experts in 1972. The survey used in this study polled a select group of financial managers and resulted in an approximation of the service needs of its financial managers in terms of subject areas and related topics.

Based on comparisons of the various subject and topic rankings with the current 837 curriculum, several findings and recommendations were made including:

1. The number of required elective courses in financial management should be increased from three to four.





2. A course in the Navy aspects of Planning, Programming, and Budgeting and Navy Budget Execution should be developed as a follow-on to the existing Public Policy Processes course.

3. Either Decision Making for Financial Management (MN 4152) or Controllershship (MN 4161) should be chosen as an elective, preferably both.

4. A capstone course in Navy financial management should be required of all Navy students in their final quarter.

5. Data processing courses need greater emphasis.

6. The required courses of the 837 curriculum appear to reflect the needs of the service in terms of emphasis. Items 2 and 4 recommend expansion of the material currently presented in MN 4163.

These items coupled with item 6 demonstrate that overall NPS has done a good job of constructing the Financial Management Curriculum. The implementation of the above recommendations should assure the 837 curriculum of meeting service needs in the financial management area. (See Appendix H)

## VI. SCHOOL NEEDS

### A. INTRODUCTION

The administration and operation of a program for the education of financial managers is not an easy task. Until the recent revamping of the 817 Management curriculum, the problem was even more complex. The school needs to be aware of the requirements of both the service and the students. Within the annual fiscal and personnel constraints imposed on it, the Naval Postgraduate School is obliged to meet the demands of the service for financial management and many other subspecialties. Where possible, the school also



attempts to respond to the needs of students. In this chapter, discussion is limited to the needs of the OR/AS Department in support of the financial management curriculum. Consideration of funding and nonfaculty personnel needs is not given.

## B. COURSE SCHEDULING

A primary concern of the Department Chairman is the scheduling of courses. The core of required courses in the 837 curriculum causes few problems in scheduling. Since the demand for such courses is relatively certain, there is little planning required. Additionally, the material covered in these courses tends to be basic in nature and many faculty members are eligible for and capable of teaching them. The scheduling of elective courses poses considerably more of a challenge. The demand for these courses is somewhat uncertain, and the specialization of the course material limits the number of faculty able to teach the course. The school needs to know the plans of the students, in terms of the elective courses they will choose, in order to better schedule the course offerings. In the financial management area, the bulk of the elective courses are taught by civilian faculty members (there are only three civilian faculty members to teach Financial Management courses). The proper utilization of these limited assets can be improved by more communication between the students and the Curriculum Coordinator about student desires for electives.



### C. COURSE DEVELOPMENT

The identification of service needs in terms of education often results in the demand for new or modified courses, such as those recommended in this study. The development of such courses requires considerable amounts of faculty time and effort. Development work is normally undertaken by a faculty member in lieu of teaching a course during a quarter. Faculty members are also regularly involved in the updating of existing courses to ensure their currency and relevance. The involvement in this effort is essential to the existence of a viable curriculum. A small faculty, as in the case of financial management at NPS, can be a problem. Professors are needed in the classroom, but must also work to develop and improve courses. In order to do both, faculty size must be examined more closely.

### D. FACULTY SIZE AND COMPOSITION

A distinct limitation of the financial management curriculum at NPS, as indicated by several faculty members, is the size and composition of financially trained faculty. At present there are eight professors and/or instructors in the finance area. As previously stated, three are civilians; the remainder are military officers with a financial management subspecialty. Only two of the civilians are used to teach the majority of the elective courses. This puts a real constraint on the faculty as well as the students. The input policy of BUPERS for the management curriculum will be a major factor in determining the adequacy





of the size of the staff. The offering of Financial and Managerial Accounting in the common core of courses for all management options depletes some of the resources of the military financial management instructors. Heavy student loads would necessitate increased teaching faculty to absorb the increased workload. Civilian faculty, if consistently pressed into classroom service, would be unable to conduct the research necessary to maintain currency and proficiency in their fields. Additional time and effort is required for the design and development of new courses as well as the updating of old courses. The value to the school and the Navy as a whole of faculty research seems to indicate a potential benefit from increased civilian faculty in the financial management area.

#### E. ASSESSMENT OF CURRICULUM EFFECTIVENESS

A strong system of internal controls in an organization dictates an information system that allows comparison of actual performance to planned performance. The planned performance of the 837 curriculum is to educate officers in the area of financial management in preparation for future assignments in that area for the Navy. The actual results, or the successes of those officers in their subspecialty, are not available until after the officers have served in at least one designated financial management billet. There is currently no formal provision for deriving feedback about curriculum strengths and weaknesses from graduates utilized in the subspecialty. One reason for this deficiency is the



random graduate utilization policy previously exhibited by BUPERS.<sup>26</sup> Such a policy made it difficult, if not impossible, to effectively track graduates until subspecialty utilization. Additionally, few graduates served in P-coded billets within two to four years after graduation. A longer period of separation from academic training without some form of practical reinforcement would probably greatly reduce the effectiveness of the education received and negatively bias any feedback. If the BUPERS policy is indeed changed to an early payback concept, like that of the Marine Corps, it should become a great deal easier to track graduates and solicit their feedback regarding curriculum effectiveness. A questionnaire designed to obtain this feedback is attached as Appendix G.

The establishment of this feedback policy would provide a liaison with the fleet billets, although informal, which would assist the school in keeping the program both relevant and current. Continuing reappraisal of the effectiveness of the curriculum on the part of the school, coupled with the review processes of the primary consultant, should keep the curriculum at a high level of both quality and uniqueness: quality in terms of the academic excellence of the material offered in financial management and uniqueness in terms of its relevance to the Navy.

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<sup>26</sup>Ibid.



Steps have recently been taken by the Curriculum Coordinator along these lines. Shortly before graduation, classes of financial management officers are debriefed on their educational experience. The quality and value of the feedback derived from such a process is great enough to support the suggestion of the follow-up questionnaire technique.

#### F. RECOMMENDATIONS

Based on the material presented in this chapter, two recommendations are proposed to help meet the school needs in the financial management program. First, it is recommended that one additional civilian faculty member be added in the financial management area. Second, it is recommended that the questionnaire, as shown in Appendix G, be sent to graduates of the financial management curriculum one year after graduation and again at three years and five years after graduation. The information obtained by this means should be summarized and used as an input to update the financial management program at NPS.

#### VII. SUMMARY

The restructuring of the curricula in the management program at the Naval Postgraduate School offered a unique opportunity to appraise the entire program for the education and utilization of financial management subspecialists. Improvement of the program, as it existed under the 817



curriculum, requires the involvement of all levels in the hierarchy of subspecialty and program control.

The primary consultant, by increasing the emphasis placed on the program at NPS, can provide the impetus necessary to ensure program improvement. A more active curriculum review policy, coupled with a stronger communication link between the consultant and the prospective subspecialists should improve the status of the program from within. Closer coordination between the consultant and BUPERS should result in more efficient utilization of graduates and enhance their value to the Navy.

The responsibility of coordinating with the primary consultant rests with the Curricular Officer/Academic Associate team. Judicious staffing of these positions can serve to improve this coordination. An equally important function of this team is to provide counselling to the students of the curricula under their control. To assist the team with this function, and to provide a more singular point of contact for the students of the 837 curriculum, the Curriculum Coordinator has been designated. The expansion of his role as an advisor or counsellor is strongly recommended. The value of the better informed faculty and students resulting from this liaison should greatly improve the program.

The 837 curriculum must meet the educational needs of the future financial managers of the Navy and other services. Based, primarily, on the responses of a few select Navy financial





managers, several changes have been recommended to the curriculum, which increase the emphasis placed on financial management in general, and the Naval aspects of financial management in particular. The implied value of some of the topic areas in the financial management subject area resulted in the prioritizing of the related elective courses offered in the curriculum. This information should be of value to future students in designing a meaningful slate of electives in the 837 curriculum. The changes proposed to the curriculum should increase the value of the education and the graduate to the Navy. (See Appendix H)

The school has two additional areas relating to the financial management program which require attention. First, to provide the necessary time for faculty research activities, and yet still offer a balanced slate of courses, the need for an additional civilian financial management faculty member is recognized. Second, a follow-up feedback procedure to poll graduates on curriculum effectiveness needs implementation.

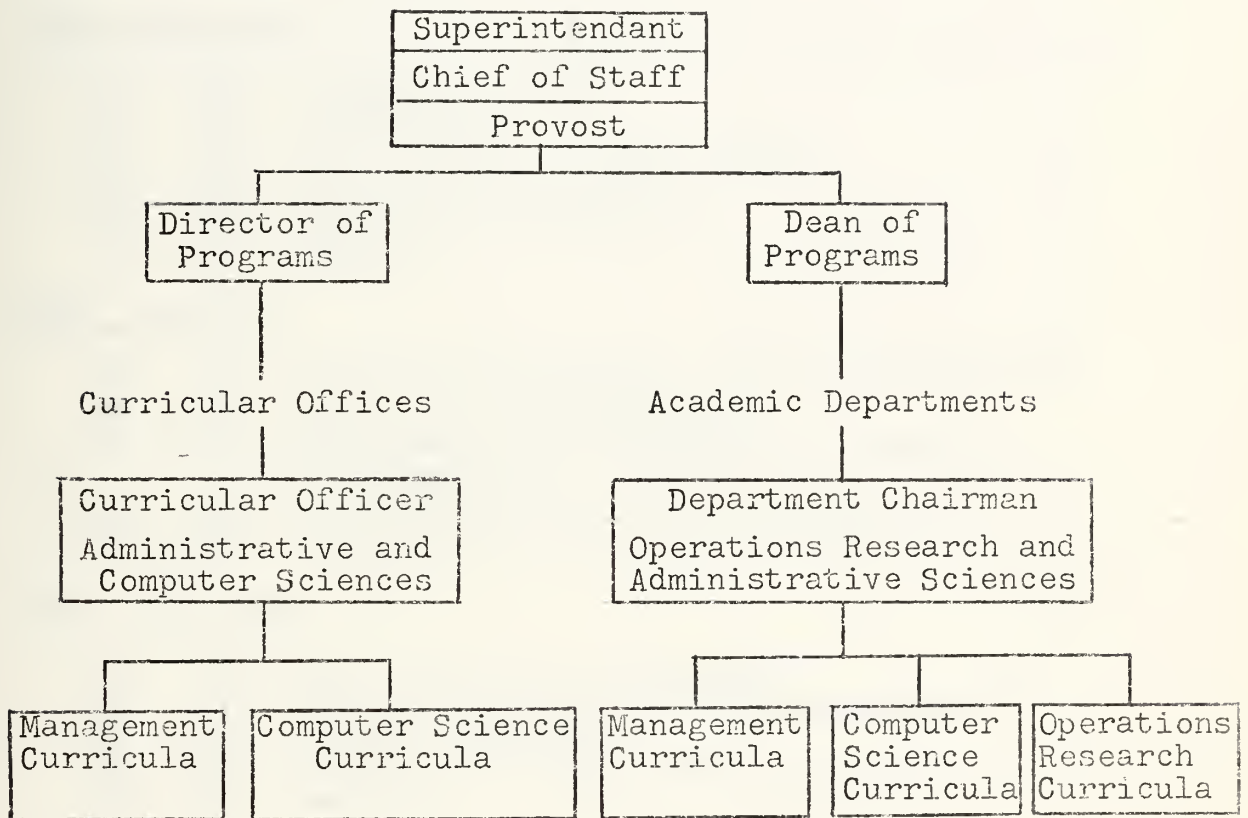
Consideration and implementation of the recommendations proposed in this study should serve to increase value to the Navy, of the NPS financial management program. Better prepared, satisfied graduates will be assets to future commands and a source of advertisement for the program to potential students. That the proposed changes can be incorporated into existing organizations and curriculum is an additional plus for the recommendations.



The existing financial management program at NPS does a good job of fulfilling the requirements of the Navy for financial managers. Minor attention to the areas addressed in this study will raise the quality of the program to outstanding.



Partial Organization Chart  
Naval Postgraduate School



APPENDIX A





## The 18 month 817 Management Curriculum

### First Quarter

MA	2040	Matrix Algebra
MA	2305	Differential Calculus
MN	2031	Economic Decision Making
MN	2106	Individual and Group Behavior
MN	2150	Financial Accounting
MN	0001	Seminar

### Second Quarter

MA	2306	Integral Calculus
PS	3005	Probability
MN	3105	Organization and Management
MN	3140	Microeconomic Theory
MN	3161	Managerial Accounting
MN	0001	Seminar

### Third Quarter

MN	3101	Personnel Management and Labor Relations
MN	3172	Public Policy Processes
MN	3183	Management Information Systems and the Computer
MN	3211	Operations Analysis for Management I
MN	0001	Seminar

### Fourth Quarter

HG	3002	Human Resource Development
MN	3212	Operations Analysis for Management II
MN	4145	Systems Analysis
MN	3XXX	Elective I in Concentration Area
MN	0001	Seminar

### Fifth Quarter

MN	3/4XXXX	Elective II in Concentration Area
MN	3/4XXXX	Elective III in Concentration Area
	3/4XXXX	Elective
MN	0810	Thesis Research
MN	0001	Seminar

### Sixth Quarter

MN	4105	Management Policy
	3/4XXXX	Elective
MN	0810	Thesis Research
MN	0001	Seminar

## APPENDIX B



# APPENDIX C

## FINANCIAL MANAGERS BILLET/PERSONNEL DATA

(As of September 1974)  
(provided by OP-924)

### NUMBER OF DESIGNATED P-CODED BILLETS

Designator	1100	1300	1400	1500	1600	2300	3100	5100	Total
Rank									
0-3	4	0	0	0	0	1	5	1	10
0-4	7	1	2	2	1	3	41	11	58
0-5	22	7	1	2	1	8	76	11	128
0-5/6	27	2	1	1	2	4	45	1	93
Total	60	10	4	5	4	16	167	22	289
Percent	20.8	3.5	1.4	1.7	1.4	5.5	57.8	7.6	100

### NUMBER OF P-CODED FINANCIAL MANAGERS

Designator	1100	1300	1400	1500	1600	2300	3100	5100	Total
Rank									
0-3	13	6	2	0	2	0	6	1	30
0-4	36	11	5	4	1	8	51	42	160
0-5	28	26	6	2	1	1	53	32	150
0-6	16	15	4	1	1	0	26	8	70
0-7	2	0	1	0	0	0	3	0	6
Total	95	58	18	7	5	9	139	83	416
Percent	22.8	13.9	4.3	1.7	1.2	2.2	33.4	20	100

	% Billets per rank	% FM's per rank	Current Manning	Desired Manning	Deficit of FM's
0-3	3.5	7.2	3.0	2.5	-5
0-4	20.0	38.5	2.76	2.5	-15
0-5	44.3	36.0	1.17	2.5	170
0-6	32.2	18.3	.817	2.5	157

OVERALL MANNING LEVEL  $\frac{416}{289} = 1.44$

OVERALL DESIRED NUMBER OF FM'S  $289 \times 2.5 = 723$

UNDERMANNING OF P-CODED FM'S = 307



APPENDIX D  
QUESTIONNAIRE

Dear

In response to your recently expressed interest in our thesis project concerning an analysis of the Financial Management curriculum at the Naval Postgraduate School, the attached questionnaire is submitted for your consideration.

The Management Curriculum (817) has recently undergone a reorganization which recognizes the various course options as separate curricula. The financial management option has been designated the 837 curriculum. One of the purposes of this reorganization is to change the scope of the education from a general management program with minor emphasis in financial management to a financial management program with some emphasis on related management areas.

The purpose of this survey is to assess the importance of various subject areas as viewed by interested, knowledgeable senior officers in the financial management community and correlate this assessment with recommendations for improvements in the new 837 curriculum.

Your interest in our thesis project and your participation in our research is greatly appreciated. Please use the enclosed addressed envelope to return the completed questionnaire.

Very respectfully,

G.K. Robinson, Jr.	B.J. Phillips
Major	USMC LT USN



## Instructions

1. Indicate your evaluation of each element with an "X" on the 0-10 scale to the right of each element. A mark of 10 indicates the highest level of importance and 0 the lowest. The first page lists the subject areas. The breakdown of elements in each subject area follows.

2. Space is provided at the end of each subject area for your specific comments, such as:

a. additions to the list of elements.

b. comments regarding specific problems encountered which may have been alleviated if the individual concerned had been given the benefit of education in the subject area/elements listed.

c. specific remarks to amplify your feelings about subject areas in general, or regarding any listed or added element.

d. cautions you consider noteworthy in adapting the elements to a classroom environment.

e. suggestions for implementing specific elements.

f. any other comment you consider pertinent.

3. If additional room is needed for comments, use the reverse side of the page.





# GENERAL SUBJECT AREAS

	0	1	2	3	4	5	6	7	8	9	10	N/O*
A. Financial Management												
B. General Management												
C. Procurement and Contract Administration												
D. Acquisition (Project) Management												
E. Personnel Management												
F. Resource Management												
G. Data Processing for Management												
H. Production Management												
I. Quantitative Methods												
J. Behavioral Sciences												
K. Economics												
L. Political Science												
M. Marketing												

COMMENTS:

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\* No opinion



## A. FINANCIAL MANAGEMENT

[illegible]



	0	1	2	3	4	5	6	7	8	9	10	N/O*
23. Financial Analysis and Decision Making												
24. Accounting Systems Design												
25. Auditing Methods and Concepts												
26. Auditing ADP Systems												
27. Operational Auditing												
28. Navy Budget Execution Process												
29. Navy Operating Management System												

Please list comments on reverse side.

\* No Opinion





B. GENERAL MANAGEMENT

1. Management Principles and Functions
2. Organization Structures
3. Leadership
4. Line and Staff Functions
5. Management Planning and Control
6. Management Styles

0	1	2	3	4	5	6	7	8	9	10	N/O

COMMENTS:

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C. PROCUREMENT AND CONTRACT ADMINISTRATION

	0	1	2	3	4	5	6	7	8	9	10	N/O
1. Procurement Policies and Practices												
2. ASPR												
3. Procurement Planning												
4. Contract Administration												
5. The Contracting Officer's Role												
6. Negotiation												
7. Customer/Contractor Relationships												
8. Pricing												
9. Contract Changes												
10. Termination												
11. DCAS												
12. DCAA												
13. Supply Management System												

COMMENTS

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D. ACQUISITION (PROJECT) MANAGEMENT

	0	1	2	3	4	5	6	7	8	9	10	N/O
1. System Acquisition Information Management System (SAIMS)												
2. The Project Management System												
3. Project Organization and Administration (details)												
4. DCP/DSARC Process												
5. Project/Contractor Relationships												
6. Coordination with Other Services												
7. Coordination with DOD, Congressional and Executive Offices												
8. Change Control												
9. Risk Analysis												
10. Procurement Accounting and Reporting System (PARS)												
11. CSCSC												

COMMENTS

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E. PERSONNEL MANAGEMENT

1. Organization and Staffing
2. Leadership
3. Training and Development
4. Performance Evaluation
5. Selection and Classification
6. Industrial Relations
7. Labor Relations
8. Union Negotiations

0	1	2	3	4	5	6	7	8	9	10	N/O

COMMENTS

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F. RESOURCE MANAGEMENT

1. Resource Management Systems (RMS)
2. PRIME
3. Logistic Support
4. Facilities Management
5. Life-cycle Costing

0	1	2	3	4	5	6	7	8	9	10	N/O

COMMENTS

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G. DATA PROCESSING FOR MANAGEMENT

1. Computers and their Use
2. Management Information Systems
3. Effective use of Data
4. Data Formats
5. Data Banks
6. COBOL Programming
7. FORTRAN Programming
8. Flow Charting
9. Computer Management

0	1	2	3	4	5	6	7	8	9	10	N/O

COMMENTS

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## H. PRODUCTION MANAGEMENT

	0	1	2	3	4	5	6	7	8	9	10	N/O
1. Scheduling Techniques												
2. Reporting												
3. Configuration Control												
4. Quality Assurance												
5. Value Engineering												
6. Inspection and Acceptance												
7. Industrial Labor Problems												

COMMENTS

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I. QUANTITATIVE METHODS

1. Business Statistics
2. Decision Analysis
3. System Effectiveness Analysis
4. Probability
5. Uncertainty and the Use of Expert Judgement
6. Linear Programming
7. Nonlinear Programming
8. Dynamic Programming
9. Queuing Theory
10. PERT/CPM Techniques
11. Inventory Models
12. Game Theory
13. Simulation

0	1	2	3	4	5	6	7	8	9	10	N/O

COMMENTS

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J. BEHAVIORAL SCIENCES

1. Motivation and Personality
2. Managerial Characteristics
3. Interpersonal Dynamics
4. Group Behavior
5. Organization Theory
6. Individual Productivity
7. Rewards and Incentives
8. Human Resources Management

0	1	2	3	4	5	6	7	8	9	10	N/O

COMMENTS

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K. ECONOMICS

1. Macroeconomics
2. Microeconomics
3. Economics of Defense
4. Systems Analysis
5. Cost Estimating Techniques
6. Cost-Effectiveness Analysis
7. Cost of Change

0	1	2	3	4	5	6	7	8	9	10	N/O

COMMENTS

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L. POLITICAL SCIENCES

1. Strategy, Tactics and Logistics
2. The International Environment
3. The National Environment
4. National Security Policy
5. Social, Political and Economic Impact of DOD Actions

0	1	2	3	4	5	6	7	8	9	10	N/O

COMMENTS:

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M. MARKETING

1. Program Marketing Techniques
  - a. Within the Navy
  - b. Within DOD
  - c. Within Congress
2. Marketing by Industry
3. Military/Industrial Relationships
4. Program Approval

0	1	2	3	4	5	6	7	8	9	10	N/O

COMMENTS:

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APPENDIX E  
SURVEY DATA AND RESULTS

GENERAL SUBJECT AREAS

	<u>Respondents</u>																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank	
A. Financial Management	10	10	10	10	10	10	10	8	10	10	10	10	10	10	9.86	1	
B. General Management	3	9	8	6	10	8	10	10	9	8	9	7	10	6	8.07	3	
C. Procurement and Contract Administration	5	8	2	8	10	3	7	2	6	8	6	4	X	8	5.92	10	
D. Acquisition (Project) Management	10	10	5	6	10	4	7	6	6	8	8	4	X	2	6.62	8	
E. Personnel Management	5	7	4	10	5	9	10	10	9	1	8	6	10	7	7.21	7	
F. Resource Management	10	9	4	10	10	5	10	10	9	10	9	8	8	10	8.71	2	
G. Data Processing for Management	10	9	4	8	10	7	8	6	8	7	9	6	9	9	7.86	4	
H. Production Management	5	8	5	8	5	1	5	3	5	7	9	4	X	2	5.15	11	
I. Quantitative Methods	5	X	5	8	10	6	7	7	8	9	10	6	8	8	7.46	6	
J. Behavioral Sciences	5	7	5	10	8	2	9	9	1	1	10	4	8	9	6.29	9	
K. Economics	10	8	8	7	8	8	10	4	7	8	5	8	6	9	7.57	5	
L. Political Science	5	8	2	6	2	3	8	6	2	6	6	4	2	4	4.57	12	
M. Marketing	5	8	5	6	2	0	5	0	5	5	5	6	7	1	3	4.14	13



# A. FINANCIAL MANAGEMENT

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank
1. PPBS	10	10	10	10	10	7	10	10	10	9	9	10	8	10	9.50	1
2. Budget Preparation	10	8	10	10	0	9	10	9	10	8	9	10	10	10	8.79	6
3. Flexible Budgets	10	5	10	4	X	9	9	3	7	8	8	9	8	6	7.38	11
4. Financial Accounting Concepts	10	7	10	5	10	5	9	7	9	10	8	8	5	9	8.00	9
5. Managerial Accounting Concepts	10	7	10	5	10	7	10	9	9	10	10	10	9	7	8.79	6
6. Cost Accounting	X	5	10	5	2	6	6	6	7	9	10	6	9	5	6.62	17
7. Corporate Accounting Principles	6	8	10	1	2	3	3	1	5	10	6	5	2	5	4.79	27
8. Financial Statement Analysis	6	9	10	1	10	7	9	1	9	10	7	10	2	5	6.86	13
9. Cash Flow Analysis and Forecasting	10	6	10	1	10	5	5	1	7	9	7	3	8	8	6.43	18
10. Cash Accounting and Control Systems	10	6	10	5	X	5	5	1	6	9	6	3	8	8	6.31	19
11. Cost-Volume Relationships	X	8	10	5	X	2	9	1	7	10	8	7	5	8	6.67	16
12. Cost Estimation	10	10	6	1	2	3	9	5	7	10	9	7	8	9	6.86	13
13. Capital Investment Analysis	7	7	10	1	0	2	3	1	9	10	9	3	2	10	5.29	25
14. Business Financing Policies	7	8	10	1	0	4	3	0	8	10	6	3	2	6	4.86	26
15. Responsibility Accounting	10	4	6	4	X	3	9	3	9	10	10	8	8	10	7.23	12
16. Accounting for Partnerships, Trusts and Estates	4	3	1	0	0	1	0	0	5	1	5	3	0	2	1.79	29





	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank
17. Accounting for Consolidated Enterprises	4	6	8	0	0	1	2	0	5	3	5	7	0	2	3.07	28
18. Inventory Accounting and Control Systems	10	7	2	8	0	2	9	2	8	9	8	5	8	8	6.14	22
19. Payroll Accounting and Control Systems	10	5	2	3	0	4	9	2	8	9	8	5	9	3	5.50	24
20. Economic Analysis	9	8	8	8	10	9	10	8	7	9	10	9	9	10	8.86	5
21. Management Control Systems	10	10	8	8	10	7	10	8	8	9	10	10	9	10	9.07	4
22. Internal Control Systems	X	10	8	8	0	5	10	8	8	9	10	9	9	9	7.92	10
23. Financial Analysis and Decision Making	7	10	10	7	10	8	10	9	9	10	10	10	9	10	9.21	2
24. Accounting Systems Design	9	7	3	7	0	6	8	5	7	8	8	4	8	7	6.21	21
25. Auditing Methods and Concepts	10	9	3	7	0	5	9	7	7	10	10	4	5	9	6.79	15
26. Auditing ADP Systems	9	8	3	7	0	6	7	5	6	8	8	3	5	9	6.00	23
27. Operational Auditing	7	8	3	10	0	3	8	6	6	9	9	5	5	9	6.29	20
28. Navy Budget Execution Process	10	10	8	10	10	10	10	9	10	10	10	10	9	2	9.14	3
29. Navy Operating Management System	10	10	6	8	X	9	8	9	10	10	10	10	8	2	8.46	8



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank
B. <u>GENERAL MANAGEMENT</u>																
1. Management Principles and Functions	10	7	8	10	10	10	10	8	9	8	9	9	9	10	9.07	1
2. Organization Structures	8	5	5	10	0	7	7	7	9	7	8	7	9	7	6.86	5
3. Leadership	10	10	3	8	0	10	10	8	9	7	10	0	10	10	7.50	3
4. Line and Staff Functions	8	6	2	8	0	8	10	6	9	8	9	7	9	7	6.93	4
5. Management Planning and Control	10	9	8	9	0	7	10	8	9	9	10	10	9	10	8.43	2
6. Management Styles	5	8	5	6	0	6	10	8	9	8	7	5	6	10	6.64	6



# C. PROCUREMENT AND CONTRACT ADMINISTRATION

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank
1. Procurement Policies and Practices	10	10	3	10	10	X	7	7	8	10	9	8	X	10	8.50	1
2. ASPR	5	8	1	10	X	X	3	7	5	8	6	4	X	5	5.64	9
3. Procurement Planning	10	10	3	7	X	X	7	4	5	10	9	7	X	10	7.45	2
4. Contract Administration	10	9	2	8	X	X	7	6	8	9	6	4	X	4	6.64	5
5. The Contracting Officer's Role	5	7	2	8	X	X	7	6	5	10	6	4	X	8	6.18	6
6. Negotiation	5	9	4	4	X	X	5	5	4	9	6	4	X	8	5.73	8
7. Customer/Contractor Relationships	5	7	4	10	X	X	5	5	2	8	7	4	X	5	5.64	9
8. Pricing	10	10	6	4	X	X	7	5	5	9	8	4	X	10	7.09	4
9. Contract Changes	5	10	2	4	X	X	2	5	5	10	6	4	X	5	5.27	12
10. Termination	5	8	2	9	X	X	2	5	6	9	6	4	X	8	5.82	7
11. DCAS	5	6	2	7	X	X	2	5	8	9	6	4	X	5	5.36	11
12. DCAA	5	6	4	7	X	X	2	5	5	9	6	4	X	5	5.27	12
13. Supply Management System	8	5	2	10	X	X	7	4	8	9	9	7	X	10	7.18	3





D. ACQUISITION (PROJECT) MANAGEMENT

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank
1. System Acquisition Information Management System (SAIMS)	10	10	1	10	X	7	7	7	5	9	10	6	5	X	7.25	6
2. The Project Management System	10	8	3	10	X	7	9	8	7	9	9	7	5	9	9.77	1
3. Project Organization and Administration (details)	7	8	3	10	X	5	7	8	5	8	6	4	5	10	6.62	9
4. DCP/DSARC Process	10	10	5	8	X	4	9	6	5	9	10	4	10	X	7.50	4
5. Project/Contractor Relationships	7	10	5	10	X	3	7	5	6	8	8	4	X	6	6.58	10
6. Coordination with Other Services	10	7	3	6	X	3	8	5	7	7	8	4	5	6	6.08	11
7. Coordination with DOD, Congressional and Executive Offices	10	10	5	9	X	7	8	6	7	6	8	4	9	9	7.54	3
8. Change Control	10	10	5	6	X	3	7	5	5	9	6	4	X	10	6.67	8
9. Risk Analysis	10	10	7	6	X	8	8	6	5	9	8	4	X	10	7.58	2
10. Procurement Accounting and Reporting System (PARS)	10	7	1	10	X	9	7	7	6	10	9	4	X	X	7.27	5
11. CSCSC	X	10	8	X	X	X	7	5	5	9	X	4	X	X	6.86	7



# E. PERSONNEL MANAGEMENT

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank
1. Organization and Staffing	5	7	4	10	0	8	10	7	9	7	10	8	10	9	7.43	2
2. Leadership	5	10	2	8	0	9	10	9	9	3	10	0	10	10	6.79	5
3. Training and Development	5	8	2	8	0	6	10	9	10	10	10	8	10	8	7.43	2
4. Performance Evaluation	5	10	4	10	0	7	10	8	9	10	10	9	10	8	7.86	1
5. Selection and Classification	5	9	2	10	0	5	10	7	7	8	9	9	10	8	7.07	4
6. Industrial Relations	5	7	3	7	0	3	10	6	7	9	8	4	10	5	6.00	7
7. Labor Relations	5	8	3	7	0	2	10	7	8	10	8	4	10	9	6.50	6
8. Union Negotiations	5	7	3	5	0	1	9	6	8	10	8	4	10	8	6.00	7



F. RESOURCE MANAGEMENT

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank
1. Resource Management Systems (RMS)	10	8	2	10	10	6	10	10	10	10	10	9	6	9	8.57	1
2. PRIME	10	6	2	10	X	3	9	7	8	9	10	9	0	9	7.08	5
3. Logistic Support	10	10	2	7	X	5	9	3	8	10	9	8	8	10	7.62	2
4. Facilities Management	7	9	2	7	X	5	9	5	9	10	9	8	6	10	7.38	3
5. Life-Cycle Costing	10	7	5	3	8	1	9	7	8	10	9	7	6	10	7.14	4



G. DATA PROCESSING FOR MANAGEMENT

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank
1. Computers and their Use	10	9	10	10	10	10	9	9	8	5	8	8	10	9	8.93	1
2. Management Information Systems	10	10	5	10	X	9	9	9	9	6	10	9	10	9	8.88	2
3. Effective Use of Data	10	9	2	10	X	8	10	8	8	9	10	9	10	9	8.62	3
4. Data Formats	7	5	2	7	X	6	8	7	6	8	8	X	6	8	6.50	6
5. Data Banks	7	5	2	7	X	7	8	7	6	8	8	6	6	8	6.54	5
6. COBOL Programming	7	5	2	1	X	5	7	4	6	7	4	4	0	3	4.23	8X
7. FORTRAN Programming	7	5	5	1	X	5	7	1	6	7	4	4	0	3	4.23	8X
8. Flow Charting	10	X	5	4	X	6	9	6	7	9	4	4	0	10	6.17	7
9. Computer Management	10	8	8	7	X	10	9	9	9	9	9	6	0	9	7.97	4





# H. PRODUCTION MANAGEMENT

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank
1. Scheduling Techniques	X	9	8	10	X	X	9	3	5	9	9	4	X	6	7.20	1
2. Reporting	X	10	6	10	X	X	7	4	5	8	8	4	X	8	7.00	2
3. Configuration Control	X	10	2	10	X	X	6	2	5	8	8	4	X	9	6.40	4
4. Quality Assurance	X	10	2	10	X	X	6	2	5	9	9	4	X	9	6.68	3
5. Value Engineering	X	7	2	7	X	X	6	2	5	8	8	4	X	7	5.60	7
6. Inspection and Acceptance	X	9	2	10	X	X	6	2	5	8	7	4	X	6	5.90	5
7. Industrial Labor Problems	X	8	2	5	X	X	7	2	5	10	9	4	X	5	5.70	6



# I. QUANTITATIVE METHODS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank	
1. Business Statistics	10	8	8	10	10	9	9	9	6	9	9	6	9	9	X	8.62	1
2. Decision Analysis	10	9	5	8	X	9	8	7	9	10	8	9	8	10		8.46	2
3. System Effectiveness Analysis	10	10	5	8	X	8	8	7	8	10	7	7	8	10		8.15	3
4. Probability	10	8	5	10	10	7	8	6	7	9	6	4	7	6		7.36	4
5. Uncertainty and the Use of Expert Judgement	10	7	8	10	0	6	10	5	7	9	8	4	X	9		7.15	5
6. Linear Programming	10	8	8	6	0	2	8	5	8	4	5	4	0	5		5.21	10
7. Nonlinear Programming	10	8	1	6	0	2	8	5	8	5	5	4	0	3		4.64	11
8. Dynamic Programming	10	7	1	6	0	4	8	5	8	4	5	4	0	3		4.64	11
9. Queuing Theory	10	8	1	6	0	5	6	4	6	3	5	4	0	3		4.36	13
10. PERT/CPM Techniques	10	10	3	6	0	7	7	2	7	10	7	4	8	8		6.36	7
11. Inventory Models	10	9	1	6	0	2	9	2	7	6	7	7	X	3		5.31	9
12. Game Theory	10	9	5	6	0	8	7	3	7	5	6	X	0	4		5.38	8
13. Simulation	10	8	8	6	0	9	9	5	7	5	8	8	0	9		6.57	6



J. BEHAVIORAL SCIENCES

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank
1. Motivation and Personality	0	10	5	10	10	10	10	8	8	5	9	4	10	9	7.71	1
2. Managerial Characteristics	0	7	1	10	X	9	10	8	8	5	9	4	8	10	6.85	3
3. Interpersonal Dynamics	0	8	3	10	X	6	10	7	0	5	8	4	X	10	5.92	8
4. Group Behavior	0	9	3	10	10	6	10	7	0	5	9	4	8	9	6.43	6X
5. Organization Theory	0	7	5	10	X	7	10	7	8	6	9	4	9	9	7.00	2
6. Individual Productivity	0	8	3	8	X	5	10	7	8	7	9	4	8	10	6.69	4
7. Rewards and Incentives	0	9	1	8	10	8	10	8	0	5	9	4	9	9	6.43	6X
8. Human Resources Management	0	10	1	10	10	5	10	8	0	5	9	4	10	9	6.50	5



K. ECONOMICS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank	
1. Macroeconomics	10	6	10	10	10	10	10	6	9	9	9	6	9	5	8	8.43	1
2. Microeconomics	10	6	5	10	8	8	10	8	7	9	9	6	9	5	8	7.79	2
3. Economics of Defense	10	7	5	5	9	9	10	7	9	9	9	8	9	8	4	7.79	2
4. Systems Analysis	10	8	5	5	0	9	9	8	9	10	8	8	7	8	7	7.57	4
5. Cost Estimating Techniques	10	10	7	0	7	7	8	8	6	9	9	9	8	8	9	7.57	4
6. Cost-Effectiveness Analysis	10	9	7	0	7	7	8	8	6	9	10	8	8	8	9	7.57	4
7. Cost of Change	10	9	7	0	7	7	8	7	6	9	8	8	5	X	9	7.08	7





L. POLITICAL SCIENCE

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank
1. Strategy, Tactics and Logistics	5	10	5	7	0	8	9	7	0	8	6	4	5	9	5.93	3
2. The International Environment	10	9	5	9	0	6	9	7	0	8	6	4	2	8	5.93	3
3. The National Environment	5	9	5	10	0	5	9	8	0	9	6	4	2	9	5.79	5
4. National Security Policy	10	10	5	10	0	7	9	8	7	9	7	4	5	5	6.86	1
5. Social, Political and Economic Impact of DOD Actions	10	8	8	10	0	6	9	7	X	8	7	4	2	8	6.69	2



M. MARKETING

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Mean	Rank
1. Program Marketing Techniques																
a. Within the Navy	0	9	9	10	0	X	5	5	8	7	6	7	0	5	5.46	5
b. Within DOD	0	9	9	10	0	X	5	5	8	7	6	7	0	6	5.54	4
c. Within Congress	0	9	9	10	0	X	5	5	8	7	6	7	0	10	5.85	1
2. Marketing by Industry	0	5	10	7	0	X	5	0	0	5	4	6	0	6	3.69	6
3. Military/Industrial Relationships	10	5	7	7	0	X	5	4	8	6	6	8	2	7	5.77	2
4. Program Approval	0	10	7	7	0	X	5	5	8	8	7	7	2	8	5.69	3



## APPENDIX F

### Selected Comments of Respondents

"In Washington, duty represents a different requirement than field duty . . . here budget seems to get all the attention, whether you like it or not."

" . . . the success of an organization depends on people. You can't know too much in this area."

"To this day I hear recent graduates moan their first financial management job has zero relationship to their academic pursuits."

"Since the system is such that a graduate of FM training is supposed to do a job commensurate with his grade rather than his experience, the trick is to prepare him to do one."

"Of most importance are General and Financial Management, which teach techniques of problem solving and acquaint the student with leadership principles that have proven effective."

"My daily duties have made me acutely aware of basic managerial ineptness in the use of data processing. Further education in this area can only help."

"I consider budgeting of principal importance. Without a clear understanding of budgeting the financial manager (military) will be unable to obtain the resources necessary to accomplish the mission."

"The greatest asset a manager can have is to understand human behavior. Work is done through people."

"People, not boxes, make an organization go."

"I concur that the Financial Management program should provide more specific financial management emphasis and less general management emphasis. However, it may be appropriate to split the Financial Management curriculum into two options.

Financial management in the Government has many aspects which are different from the financial management in the corporate sector. Graduates of a Financial Management program could fill a variety of jobs in the Navy. Job requirements in NAVCOMPT and its field activities would be far different from job requirements as a Business/Financial Manager in a major weapons acquisition project. Consequently, your study should consider the merit of including two



Financial Management options: one heavily stressing corporate finance and preparing a person for a Business/Financial Management job in the Navy, and one curriculum which prepares the person for an internal Navy financial management job."

"Speaking as a person with six consecutive tours in the FM business, I heartily endorse the reorganization at NPGS which recognizes a separate FM curriculum. My responses have been geared to what I feel is important to the Navy financial manager. Since dollar considerations drive so many of the operational decisions, I believe that all disciplines at NPGS should be required to have some of the FM curriculum (PPBS, Budget Preparation/Execution, etc.)."

"Keep in mind we need graduates ready to manage--the degree should be secondary."





## APPENDIX G

### Proposed Questionnaire for Financial Management Graduates

Dear

As a recent graduate of the financial management curriculum (837) at the Naval Postgraduate School, and a "veteran" of one subspecialty billet your cooperation in answering the enclosed questionnaire is solicited.

Enclosure 1 presents a brief overview of the present curriculum, a listing of required and financial management elective courses, and a description of each of the listed courses. Enclosure 2 is the survey which solicits your opinions and views on various aspects of the curriculum designed to produce financial managers.

Your answers and comments will be used to assist us in recommending improvements to the existing curriculum, to keep it both beneficial and relevant to the needs of the graduates for future billets. Your response to this questionnaire need not end your feedback of information. As you progress through your career your suggestions or comments are always invited and welcomed regarding this curriculum.

Your assistance with and participation in this project is greatly appreciated.

Curriculum Coordinator  
837 Curriculum  
Naval Postgraduate School



## FINANCIAL MANAGEMENT CURRICULUM

The 837 curriculum (previously 817) at the Naval Postgraduate School is an 18 month, six quarter program encompassing 23 courses and 86 quarter-hours. Graduation is possible in as little as 12 months depending on educational background.

The program requires that students complete (or validate) a minimum of five financial management courses (20 quarter-hours) in addition to the other prescribed courses. Two of the five financial management courses are required courses which are taken during the first two quarters: Financial Accounting and Managerial Accounting. The other three courses are selected from various financial management electives. It should be noted that the curriculum presently includes two "free" electives which may be selected from any of the management subspecialty areas, including financial management.

The following is a list of both the required and financial management electives for the 837 curriculum.

### I. Required Courses (grouped by content)

#### A. Quantitative Methods

- (F) MA 2040 Matrix Algebra
- (F) MA 2305 Differential Calculus
- (F) MA 2306 Integral Calculus
- (F) PS 3005 Probability
- (G) MN 3211 Operations Analysis for Management (Part I)
- (G) MN 3212 Operations Analysis for Management (Part II)
- (G) MN 4145 Systems Analysis

#### B. Human Resources and Organizational Theory and Practice

- (F) MN 2106 Individual and Group Behavior
- (F) MN 3105 Organization and Management
- (G) MN 3101 Personnel Management and Labor Relations
- (G) MN 3185 Management Information Systems and the Computer
- (G) HG 3002 Human Resource Development
- (G) MN 4105 Management Policy



## C. Financial Management and Resource Allocation

- (F) MN 2031 Economic Decision Making
- (F) MN 2150 Financial Accounting
- (F) MN 3140 Microeconomic Theory
- (F) MN 3161 Managerial Accounting
- (G) MN 3172 Public Policy Processes (Defense Resources Allocation)

## II. Elective Courses

### A. Financial Management (Minimum of three)

- MN 3165 Selected Topics in Accounting and Financial Management
- MN 3251 Accounting Theory and Standards
- MN 4151 Internal Control and Auditing
- MN 4152 Decision Making for Financial Management
- MN 4153 Seminar in Accounting and Control
- MN 4154 Seminar in Financial Management
- MN 4161 Controllershship
- MN 4162 Cost Accounting
- MN 4163 Financial Management in the Navy
- MN 4165 Selected Topics in Accounting and Financial Management
- MN 4181 Application of Management Information Systems

### B. Other Management Subspecialty Areas (maximum of two)

(F) indicates courses offered in the two preparatory quarters (the fundamentals section) containing basically undergraduate level courses taken by students without recent course work in the area.

(G) indicates graduate level courses in the graduate section of the curriculum.

## REQUIRED COURSE DESCRIPTIONS

MA 2040 Matrix Algebra. Linear equations, systems of equations, determinants, matrices and vectors, addition and multiplication of matrices, inverse of a matrix, partitioned matrices, vector spaces and subspaces, rank of a matrix.

MA 2305 Differential Calculus. Brief review of Algebra, differential calculus of power functions, logarithmic functions and exponential functions; multivariable calculus; maxima and minima with and without constraints. Applications will be primarily from the field of economics and administrative science.





MA 2306 Integral Calculus. Integral calculus of power functions, logarithmic functions and exponential functions.

PS 3005 Probability. Random variables, probability mass functions, density functions, sample spaces, probability axioms, independence, moments, derived distributions, Bayes Theorem, sampling, sample statistics.

MN 2031 Economic Decision Making. The macroeconomic section includes a presentation of methods of national income determination, the consumption function and the multiplier concepts and the impact of fiscal and monetary policies. The microeconomic section covers an introduction to individual economic decision processes and their relation to the attainment of market equilibria.

MN 2106 Individual and Group Behavior. A survey of individual and group behavior with emphasis on those aspects which affect performance and satisfaction within an organization. Topics include motivation, learning, personality, leadership, group effectiveness and role behavior.

MN 2105 Financial Accounting. Study of the basic postulates and principles of accounting. Specific topics include the accounting cycle, asset valuation, equities and capital structure, financial statement analysis, and elementary cost accounting.

MN 3101 Personnel Management and Labor Relations. Study of the principles and practices of personnel administration in business and government organizations. A survey of the history, development, and current status of labor-management relations in industry and government. Analysis of the labor market and the implications of government regulations for wages and labor-management bargaining.

HG 3002 Human Resource Development. Studies and experimental learning laboratory for the Navy's Human Goals Program. The course emphasizes the importance of dealing with persistent social problems in the military, provides knowledge in the four topical areas of race, drugs, intercultural relations, and organizational development. Awareness of personal attitudes and processes for working in these areas are examined.

MN 3105 Organization and Management. The study of the management of organizations emphasizing human and organizational variables and their implications for managerial action. Topics include the theories of management, organizational behavior, planning and control, and organizational development.





MN 3140 Microeconomic Theory. Determination of the allocation of resources and the composition of output. Consumer and Producer Choice Theory. Partial and general equilibrium analysis. Welfare economics. Applications to defense problems are emphasized.

MN 3161 Managerial Accounting. Survey of cost accounting systems, including overhead costing, job order and process cost systems, variable and absorption costing, and standard costs. Emphasis is on applications of accounting data to planning, control, and decision making. Topics covered include flexible budgets, variance analysis, cost-volume-profit analysis, and incremental profit analysis. Capital budgeting is examined extensively.

MN 3172 Public Policy Processes. A presentation of the processes by which resources are allocated to the production of goods in the defense sector. Defense budget preparation, Presidential policy-making and management, and Congressional budget action are considered and placed within the context of the theory of public goods.

MN 3183 Management Information Systems and the Computer. Study of what an information system is, how the computer and other resources fit into the system, and management considerations involved in computer-based and other information systems. Study of basic computer and MIS concepts as required, including computer and data structures, input/output systems, and file organization. Survey of programming and data-base management languages at various levels.

MN 3211 Operations Analysis for Management (Part I). A survey of philosophy and methods of operations research. Emphasis is on model building and the application of the models to managerial problems.

MN 3212 Operations Analysis for Management (Part II). A continuation of MN 3211

MN 4105 Management Policy. Study and appraisal of a variety of policies requiring the analysis of problems and the formulation of decisions in both business and governmental enterprises. Use of case material, management games, and other devices as exercises in decision making and the executive action under conditions of uncertainty and change.

MN 4145 Systems Analysis. This course will concentrate on the analysis of large scale defense resource allocation problems, using cost-effectiveness models. Topics include discounting, constrained optimization problems, and efficiency over time. Systems analysis case studies will be emphasized.



## ELECTIVE COURSE DESCRIPTIONS

MN 3165 Selected Topics in Accounting and Financial Management. Presentation of a wide selection of topics from the current literature. This course may be repeated for credit if course content changes.

MN 3251 Accounting Theory and Standards. Study of the basic concepts, standards, principles, and practices underlying published financial reports. Specific topics include approaches to the specification of accounting principles, bases of asset valuation, income measurement, and the measurement of corporate equities. Attention is devoted to current generally accepted accounting principles, to controversial reporting problems, and to prospective new developments.

MN 4151 Internal Control and Auditing. Study of the objectives and procedures of internal control in government and industry. Examination of the independent audit function, including auditing standards and reports. Study of the internal auditing with emphasis on operational audits. Consideration of the principal Federal audit organizations. Selected topics including sampling techniques for auditing, audits of computer-based systems, and audit problems associated with selected assets and operations.

MN 4152 Decision Making for Financial Management. The management of the finance function in government and industry. Specific topics include cash and working capital management, long-term financing, determination of optimal capital structure, and valuation of a going concern.

MN 4153 Seminar in Accounting and Control. Research and discussion of current developments and controversies in accounting and financial controls for government and industry. Students will be expected to do individual or small group studies and to make reports thereon.

MN 4154 Seminar in Financial Management. Study of the theories of and applications in the administration and allocation of financial resources.

MN 4161 Controllershship. This course employs the case method of study and seeks to integrate the various disciplines that support the management function, with particular emphasis on financial analysis for decision making.

MN 4162 Cost Accounting. Review of various definitions of cost and alternative ways of measuring cost. Study of cost accounting systems, methods of allocating costs to cost objects, and the costing of activities, products, and projects. Consideration of the objectives and the substance of Federal cost accounting standards.



MN 4163 Financial Management in the Navy. Studies the area of financial management in the Navy with emphasis on the methods and procedures used in obtaining and controlling funds. The course covers four specific areas: (1) Fund accounting, (2) organizations involved with the control of Navy funds, (3) ties the planning, programming, and budgeting system (PPBS) to the overall financial management, and (4) execution and control of funds.

MN 4165 Selected Topics in Accounting and Financial Management. Presentation of a wide selection of topics from the current literature.

MN 4181 Applications of Management Information Systems. Advanced study of management information as it relates to various organizational systems. Students will study actual industrial and/or military organizations in the context of management information systems. The issues of design, implementation, and operation of a management information system will be considered through the use of case studies of industrial and military organizations.





## SURVEY QUESTIONS

1. Are any of the financial management elective courses listed in Enclosure 1 of enough importance to all potential Naval financial managers to merit their inclusion in the list of required courses for a 9410 P-code?

YES

NO

If so, list the elective course numbers.

2. The present 837 curriculum requires a minimum of 3 of the financial management electives listed in Enclosure 1 for a 9410 P-code. The remaining 2 electives may be selected from any of the management option areas (i.e., material, personnel, etc.) including financial. Should there be more financial management electives required of the 837 students in place of the current "free" electives?

YES

NO

If so, how many electives should be financially oriented?

3. Please rank, in order of importance, the five financial management elective courses listed in Enclosure 1 that you would select as most beneficial for future Naval financial managers.

1.

2.

3.

4.

5.





4. Are there any areas not covered by the courses listed in Enclosure 1 which should be addressed in courses at NPS to enhance the 837 curriculum?

YES

NO

If so, please list them.

5. Are there any courses listed in Enclosure 1 which appear superfluous or unnecessary for Naval financial managers?

YES

NO

If so, please list them.

6. The current 837 curriculum is designed to meet the needs of the Unrestricted Line Officer. Do you see a need for specific courses tailored to the needs of the non-URL students such as CEC, Supply, Coast Guard, or Marine Corps?

YES

NO

If so, please list course areas and their communities.

7. What do you see as the greatest needs of the service in terms of its financial managers?

8. If you have any additional comments, please list them below.



## APPENDIX H

### PROPOSED 837 CURRICULUM

#### First Quarter

MA 2040	Matrix Algebra
MA 2305	Differential Calculus
MN 2031	Economic Decision Making
MN 2106	Individual and Group Behavior
MN 2150	Financial Accounting
MN 0001	Seminar

#### Second Quarter

MA 2306	Integral Calculus
PS 3005	Probability
MN 3105	Organization and Management
MN 3140	Microeconomic Theory
MN 3161	Managerial Accounting
MN 0001	Seminar

#### Third Quarter

MN 3101	Personnel Management and Labor Relations
MN 3172	Public Policy Processes
MN 3183	Management Information Systems and the Computer
MN 3211	Operations Analysis for Management I
MN 0001	Seminar

#### Fourth Quarter

HG 3002	Human Resource Development
MN 3212	Operations Analysis for Management II
*MN 3XXX	Planning-Programming-Budgeting in the Navy
MN 0001	Seminar

#### Fifth Quarter

*MN 4XXX	Financial Management Elective (either MN 4152 or 4161)
MN 4XXX	Financial Management Elective
MN 3/4XXXX	Free Elective
MN 0810	Thesis Research
MN 0001	Seminar

\* Denotes change from existing curriculum



## Sixth Quarter

MN 4105	Management Policy
*MN 4XXX	Financial Management in the Navy
MN 0810	Thesis Research
MN 0001	Seminar

\* Denotes change from existing curriculum.



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